

# THE ARCHITECT & BUILDING NEWS

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APRIL 17, 1952

VOL. 201

NO. 4348

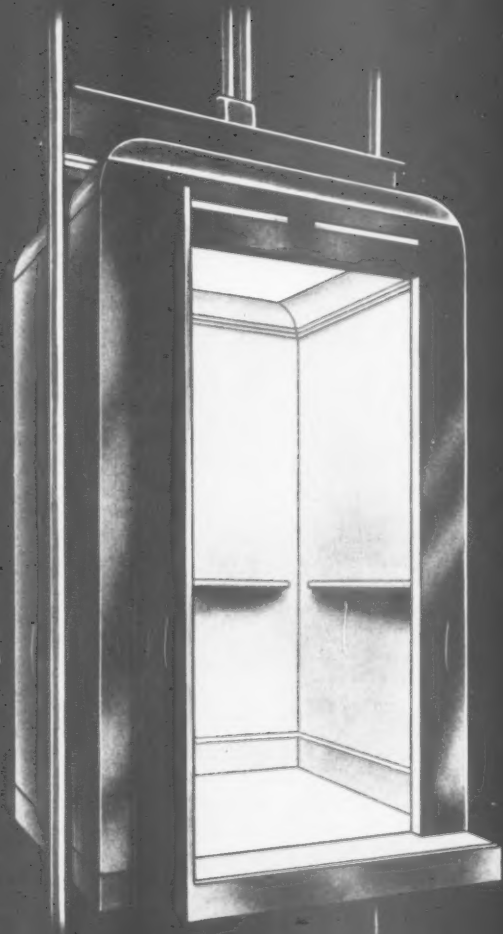
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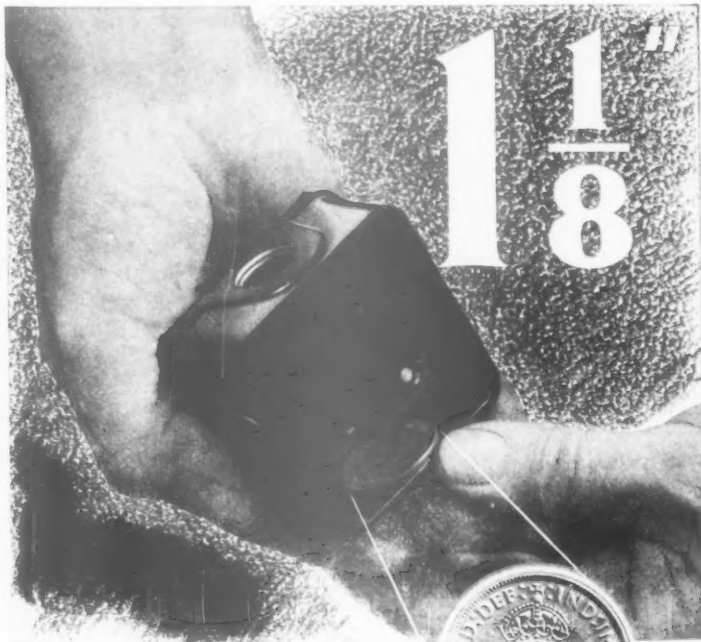
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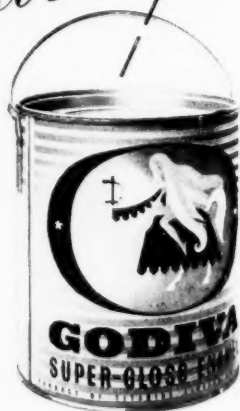
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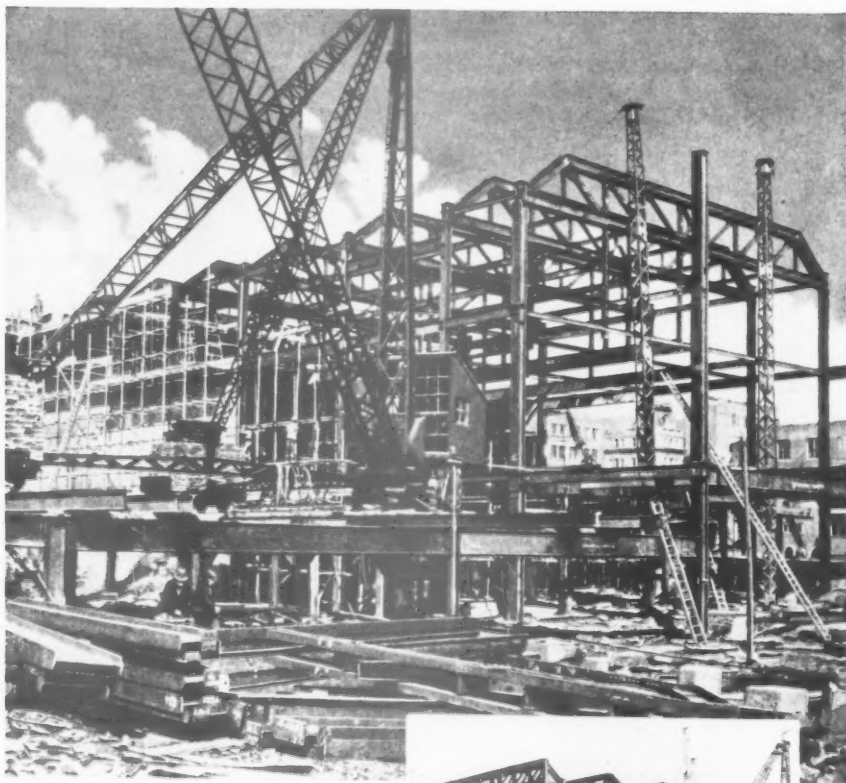
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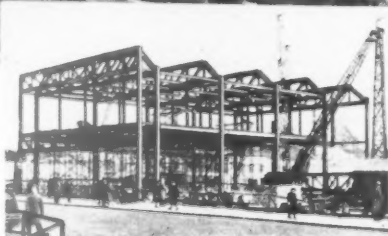


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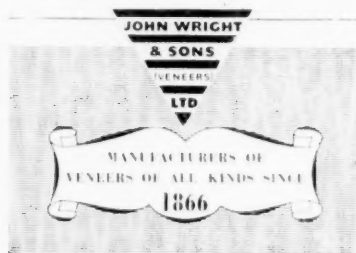


# Enduring Beauty

## OF ENGLISH CRAFTSMANSHIP

A Nottingham Loving Cup, made in 1740.

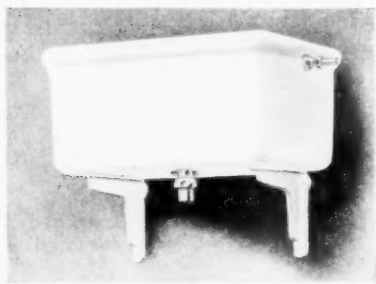
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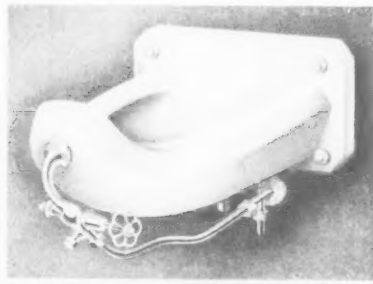
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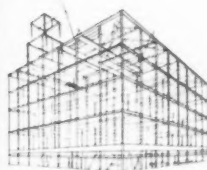
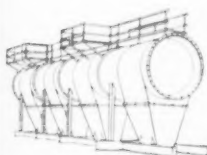
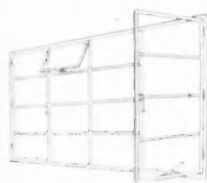
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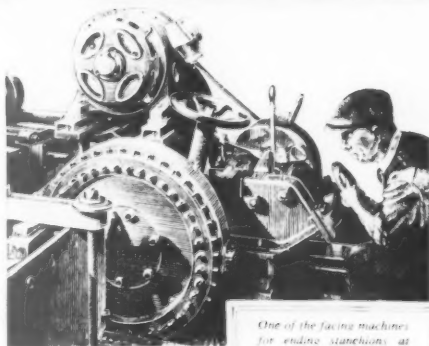
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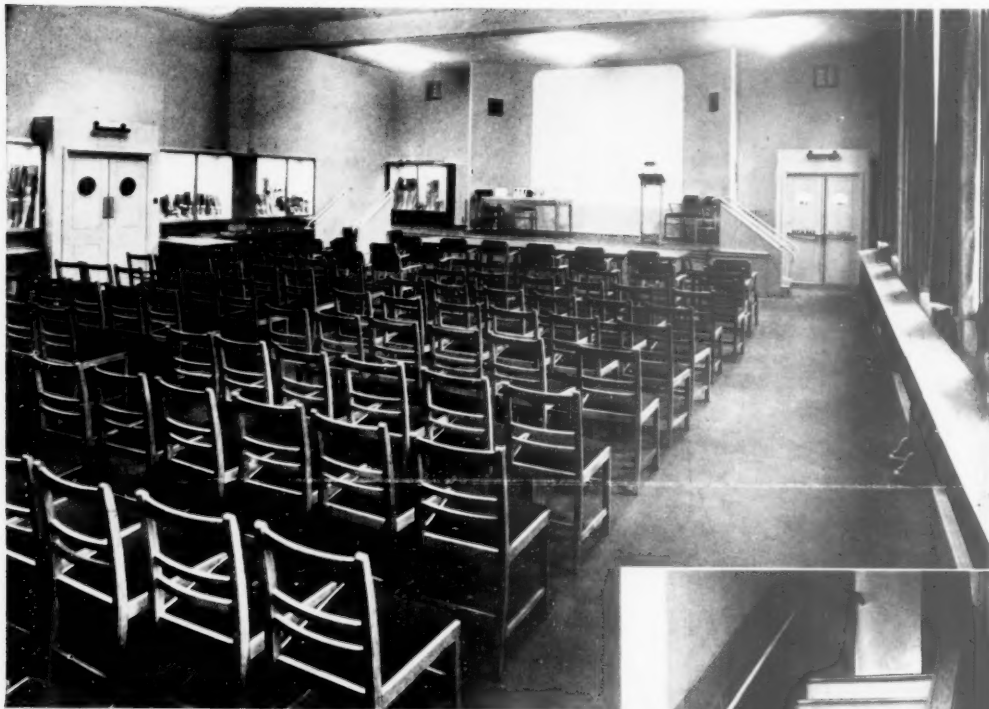
*One of the facing machines for ending stanchions at Banister, Walton's works at Trafford Park, Manchester.*

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THE  
**ARCHITECT**  
& BUILDING NEWS

April 17 1952

The "Architect and Building News" incorporates the "Architect," founded in 1859, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada \$9.00.

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## "THIS IS ONE OF THE DRAWINGS REFERRED TO . . ."

IT is becoming something of a commonplace, when productivity is under consideration to suggest that costs can be reduced and time saved if only the architect would . . . etc. And one of the complaints is that drawings are not ready when required or even sometimes when the job starts.

There is so near a consensus of opinion that the whole building industry is itself in need of some reorganization especially in relation to distribution and transport and to co-ordination with "sub-contractors" and other "off-site" operators, that any passing of the buck is not becoming. This is not to suggest that all architects are without fault; it is, alas! true that inequalities of efficiency and quality exist in every trade and profession and cause corresponding delays.

The fact, being a fact, remains—that high productivity is, as it should be, a result of co-operation and understanding between the three top personalities of a building job: the client, the architect and the contractor. Any way of enlightening each and all of these parties regarding the others' difficulties is likely to produce greater understanding that cannot but make for reduction of cost and speed of erection.

The relation between the client and his architect is earlier and perhaps more intimate than that between the builder and the architect and, therefore, it is probable that they can reach sympathetic understanding while delays are confined to paper and the four walls of private and public offices. But we wonder just how much the builder appreciates the architect's difficulties in these exceptional days. Even if the architect is fortunate enough to synchronize planning permissions with development-charge

negotiations and change of use with the daylight code and other preliminaries of his commission in agreement with his client and all the others who may be concerned, it is often the case that many later proceedings do not fit in so that the job can go smoothly and that these are mostly outside his control.

Just at present many architects have clients' instructions in files and sketch plans in drawing chests which cannot be reasonably proceeded with because, under restriction of capital expenditure, the jobs would not stand a chance of a licence; or, because of the steel shortage they cannot be started even if the drawings are complete and a licence imminent. Yet the Ministries concerned do little or nothing to assist the architect and his client by giving indications of probabilities of this or that job being more likely to get a licence or the other job being certain to go ahead at some reasonably approximate date. If this could be done more often the architect could plan his office work ahead and keep perhaps several jobs proceeding slowly on the drawing board against the day of starting site-work. As it is he often reduces staff and then finds himself shorthanded in the face of unexpected permits or licences.

If such are expressions of difficulty and delay, realization of them may lead to fuller co-operation between all parties. When a job has to start suddenly, sometimes, as we have observed, to the surprise of both client and architect, the builder could and should help the situation by arranging to split the contract into parts, by producing time and progress schedules promptly, by letting the architect have his



requirements for drawings in strict order of priority, for it is not unlikely, in these days, that the job he is starting upon is one that has been laid aside for months or even years and that the drawings, for that reason, are incomplete or need revision; or, if the job is taken in stages, or split contracts, when the drawings were originally prepared for one straight-through procedure, then the contractor can again help by understanding the particular situation and assisting to plan a solution to the peculiar difficulties.

We have heard of many varying cases that would illustrate and enlarge the points made above, but

a leading article is not the place to set them out in detail. We feel that many of our readers know the difficulties better than we do and could supply many illustrations of building delay and answers to the contractor's request for "drawings in time," and these might eclipse anything we have heard or said.

Understanding and recognition of these things is a half-way house to fuller co-operation and ultimate co-ordination between all concerned with cheapening or speeding building operations. Such an approach, it seems to us, is a better way than assuming the other fellow is not up to scratch.



*This concrete structure designed by Finsterwalder, Pistor and Gutschow was exhibited at the recent "Constructa" Exhibition at Hanover and is now a restaurant.*

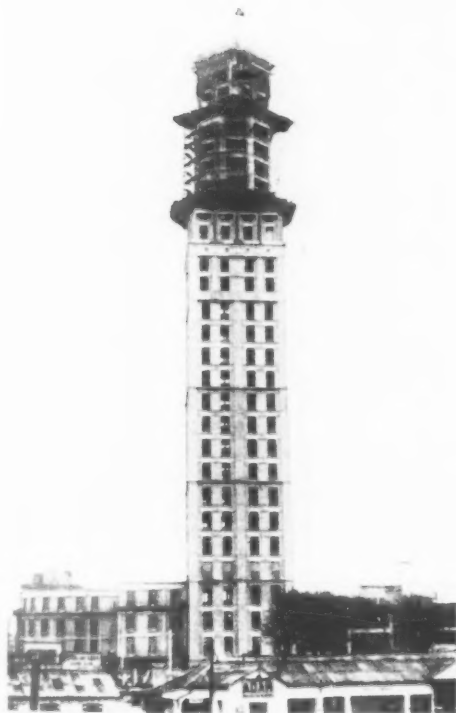


# EVENTS AND COMMENTS

## RESEARCH AND THE PRACTICAL MAN

Two weeks ago I wrote on the thermal insulation of buildings and mentioned that there was still a big gulf between the B.R.S. and the practical builder. My attention has since been drawn to another aspect of the same problem. One of the suggested ways of improving the thermal insulation of external walls and of ceilings under flat roofs is to cover them with fibre board on battens. This advice appears often in print with never a word about the fire hazard involved. At the D.S.I.R. and Fire Offices Committee fire testing station at Elstree elaborate experiments have been carried out with a complete house lined with untreated fibreboard. These experiments showed that the spread of flame on fibre board was a serious fire hazard unless the board was either plastered or covered with plasterboard. The spread of flame test was developed as a result of these experiments. Surely there should be some co-ordinating authority responsible for seeing that when two groups of scientists are experimenting on the same material from different viewpoints they take into account each others experiments when publishing their answers.

Architects are, on the whole, not very fire conscious. Indeed, I think the majority only bother about the subject seriously when the L.C.C. means of escape department is



Thirty-storey skyscraper at Amiens, which has recently been officially opened.

in the offing. No doubt in domestic work there is not much need to worry when using traditional materials since they are well tried and do not provide very serious fire hazards. With newer materials, however, architects should be more inquisitive and more cautious. They cannot be held responsible for the silly behaviour of householders but they can at least make certain that they do not force them to live in tinder boxes.

## THE L.M.B.A. WANTS TO 'KNOW'

The technical officer to the London Master Builders' Association wants to hear from anyone who has experience of the economics of quality control of concrete. The technique of quality control is, of course, well understood but there are many jobs on which quality control of concrete is not of prime importance to the job itself. The L.M.B.A. is seeking to balance the economics of quality control against the cost of the control measures. If anyone is in possession of facts which might help would they please write to Mr. E. G. Dean?

The L.M.B.A. also wants to know the amount of land in London still held by its members for house building purposes. It is at present engaged in sending out a questionnaire to its members on this point. Information is also requested on the attitude of Local Authorities to the issue of block licences and transfer licences and the arrangements for working the 1:1 ratio.



Philip Gatlip, A.R.P.S.

Water tower at Thorpeness, Suffolk, converted into a house.



Cleaning the windows of the U.N.O. Headquarters building, Manhattan

#### SELF-HELP HOUSING ASSOCIATIONS

I predict a flood of these organizations. They seem to have the Government's blessing and there is no doubt that, given a chance, they produce houses remarkably quickly.

They require a high level of tenacity of purpose among their members if they are to overcome the inevitable setbacks of building in these days. One must admire the courage of members of such associations in devoting their whole spare time for up to a year to learning about building before a sod is turned. It is only natural that the existing and successful Associations should be flooded with enquiries from would-be imitators. These associations are only too willing to help newcomers. One thing, however, does trouble me, and that is the supply of adequate professional advice to such associations, not only to make sure that they build houses which will please them to live in but also to make sure that they do not dot the country with architectural horrors. Might we not form a panel of architects willing to assist self-help building associations in their own localities at a special fee—with official permission, of course. It is important that some arrangements should be made before the movement becomes nationwide.

#### A BUILDING GRAND NATIONAL

I imagine that the bookies' union, if there is such a thing, will in future have scouts out for Mr. Harry Lane's parties at race meetings, for they must be a turf accountants' nightmare. Mr. Lane, a Stockton-on-Tees building contractor, apparently makes a habit of taking most of his firm with him to important meetings when he has a horse running. He took a special trainload to the Grand National at a cost of £750. They all backed Teal, which won at 100 to 7. Much the same sort of thing happened at the Lincoln last year. This must surely rank as an incentive in Mr. Lane's firm. Mr. Woodbine Parish please note.

ABNER

## NEWS OF THE WEEK

### Hemel Hempstead's 1,000th House

On Wednesday, April 23, Mr. Marples, Parliamentary Secretary to the M.O.H. & L.G., is to hand over the key of Hemel Hempstead Development Corporation's 1,000th new house to the tenant, after which Mr. Marples will tour the new town.

Hemel Hempstead is the first of the new towns to complete 1,000 houses (1,003 were completed up to the end of March). It is expected that 1,000 houses will be completed during 1952. In addition 14 shops, two schools and three factories have been completed.

### Services and Equipment in Houses

The Minister of Housing and Local Government, Mr. Harold Macmillan, has followed up his suggestions for economising in the design of houses—demonstrated in "The People's House"—by asking local housing authorities to consider whether they can save scarce materials and labour,

and keep rents down, by reviewing the equipment of their houses.

"There is no suggestion that essential services or equipment should be omitted," the circular says, "but a significant reduction in the cost of the house—and consequently in the rent at which it can be let—can be made if the essential is distinguished from the unessential."

Mr. Macmillan points out that a saving of £50 in the capital cost of a house is equivalent to a reduction of over 10d a week in the rent. He suggests that many prospective tenants might prefer to do without some of the less necessary, though still desirable, services and items of equipment if by doing so they could still have a good house at a lower rent.

The important thing is that the local authorities should take account of the requirements of the people to whom their houses will be let. These are likely to vary between area and area, and indeed within the same area. If so, the Authority might decide to install services and equipment of different standards in different groups of houses, at appropriately varying rents.

### Scottish Byelaw Working Party Set Up

Mr. James Stuart, Secretary of State for Scotland, has set up a Working Party to revise the model building byelaws for burghs and counties. He has instructed it to pay particular attention to changes in building standards and techniques in this and other countries, and to the need for economy in the use of materials.

The members of the Working Party, who have been nominated to represent the three associations of local authorities, the Ministry of Works, the Scottish Special Housing Association, and the Department of Health for Scotland, are: R. Woodcock, A.R.I.B.A., A.M.T.P.I. (chairman), Deputy Chief Architect, Department of Health for Scotland; J. M. M. Anderson, A.R.I.B.A., Senior Architect, Scottish Special Housing Association; G. M. Campbell, A.R.I.A.S., architect, Department of Health for Scotland; W. P. Haldane, M.B.E., B.Sc., M.I.C.E., M.T.P.I., City Engineer of Edinburgh; A. Y. Hamilton, A.R.I.C.S., Quantity Surveyor, Department of Health for

Scotland, A. I. D. Macdonald, A.R.I.B.A., Technical Information Officer, Ministry of Works; John Penman, B.Sc., Burgh Surveyor of Perth; and Thomas B. Pollock, County Sanitary Inspector of Lanarkshire.

## ARCU Annual Report 1951

The annual report for the year 1951 of the A.R.C. of U.K. has just been issued and contains a number of facts which are of interest.

Five unregistered persons were prosecuted during the year at the instance of the Council for unlawfully practising or carrying on business under the title of architect. In addition to fines in four cases, the Council were awarded costs.

The Discipline Committee held enquiry into 7 complaints during the year.

The Council considered whether it was appropriate for an architect to seek to be placed upon a panel of architects maintained by a local authority or to enquire whether a local authority maintains such a panel. The Council were of the opinion that an architect should not do so, in order that there may be no suspicion of "touting" for business, but should seek guidance and information from the local Society of Architects in the district concerned.

The question was raised as to whether an architect may allow his name to appear in the classified list of members in the Year Book of a Chamber of Commerce arranged according to trades and professions. The Council were of the opinion that for an architect to allow his name to appear in a published list of architects restricted to members of a Chamber of Commerce would be tantamount to advertising and is therefore not permissible.

The Council also considered a complaint that an exhibition advertised in the Press was held to illustrate the work of two architects. The Council considered this to be a means of advertising and not permissible.

During the year £7,528 12s 4d was spent in Scholarship grants to students; £5,458 2s 4d in renewing existing scholarships; and £2,070 10s in new awards.

There were 92 applications for admission to the 1951 examination. 19 were eventually recommended for scholarships.

The total number of architects on the Register is 17,072. During the year 1,056 persons qualified by examination and were admitted.

The Committee considered and rejected 3 applications under Regulation 26 (b), which provides for exceptional cases in which an architect of undoubted standing and generally recognized by the profession as such, can apply for registration.



*The White House, Washington, rebuilt at the cost of 5,700,000 dollars*

Mr. Sydney Loweth, F.S.A., F.R.I.B.A., County Architect for Kent, has been elected a member of the Franco-British Union of Architects.

\* \* \*

The riverside walk along the South Bank of the Thames between Westminster and Waterloo Bridge is now open to pedestrians.

### APPOINTMENTS

Mr. Alexander Steele, D.A.(Edin.), A.R.I.B.A., of Birmingham, has been appointed to the post of Senior Deputy City Architect, salary £2,000 a year.

Since 1948 he has been architect to Birmingham Education Committee. He has previously held posts with architectural firms in Edinburgh and a number of English cities. There were 73 applicants.

Following the resignation of Mr. D. L. Plumstead some months ago from the post of Planning Officer, Edinburgh, Mr. Thomas T. Hewitson, A.R.I.B.A., who acted as deputy has been appointed Planning Officer, salary £1,700 a year.

Mr. Hewitson has previously held appointments with London County Council, Ministry of Town & Country Planning. He served with the R.E.s during the war.

Mr. G. J. Barrington, A.M.T.P.I., of the City Architects' Department, Coventry, has been appointed Deputy Planning Officer for the County of Cornwall.

Mr. Thomas Dixon, L.R.I.B.A., has been appointed Chief Assistant Architect to Dover Corporation.

### OBITUARY

Mr. Thomas Faulkner Shephard, F.R.I.B.A., of Birkenhead, on March 28, at the age of 77.

Mr. William John Taylor, F.R.I.B.A., of Inverness, on March 29.

### COMING EVENTS

During his forthcoming visit to London, Mr. G. E. Kidder Smith is to give an illustrated lecture on "Italian Contemporary Architecture and the Italian Heritage," on Monday, April 28 at 6 p.m., at the Royal Institute of British Architects, 66, Portland Place.

As the lecture will take place during the run of the Italian Contemporary Architecture Exhibition, it should be of special interest, particularly in view of the very fine slides, many of them in colour, which Mr. Kidder Smith will be showing.

#### *The Ecclesiological Society*

April 21, 7 p.m. Lecture on "The Work of the Central Council for the Care of Churches," by Francis C. Eeles, Esq., O.B.E., D.Litt., F.S.A.(Scot.), F.R.Hist.S., at Walcot House, 139, Kennington Road, S.E.11.

#### *Royal Society of Arts*

April 23, 2.30 p.m. Lecture on "The Printer and Designer," by Sir Francis Meynell, R.D.I. (Percy Smith Memorial Lecture), at John Adam Street, Adelphi, W.C.2.

#### *Royal Institute of British Architects*

April 22, 6 p.m. Lecture on "British Standards and the Architect," by E. D. Mills, F.R.I.B.A., P. Cutbush, A.R.I.B.A., and G. Weston, B.Sc., at 66, Portland Place, W.1.

#### *The Housing Centre Trust*

April 22, 6 p.m. Discussion on "Survey and Plan for Woolwich Town Centre," Arthur King, Esq., presiding. At 13, Suffolk Street, Haymarket, S.W.1.

#### *British Colour Council*

April 23. Annual General Meeting, at 13, Portman Square, W.1.

## IN PARLIAMENT

### New Towns: Second Instalment

During the second reading debate on the New Towns Bill on March 31, Mr. Marples, Parliamentary Secretary to the Ministry of Housing and Local Government, gave the Commons an estimate of the final cost to the Exchequer of the new towns programme. He put the figure at something between £225 millions and £250 millions, on the basis of the 14 areas already designated, but pointed out that estimating in this case was "perilously like conjecture," and he gave the figure for what it was worth, with the qualification that he would not like in future to be bound by it.

The Bill authorizes the expenditure of a further £50 millions on the new towns, and the Government expect this to last until July, 1954, when it will be necessary to seek authority from Parliament for further money. A similar sum of £50 millions was authorized by the original Act in 1946. This first instalment, Mr. Marples explained, had lasted almost a year longer than the five which it was then estimated that it would serve. The reason for that was that constructional work had not proceeded as speedily as was originally planned. The second instalment now sought, it was hoped, would be spent in two years. This acceleration in expenditure was due to the fact that the early constructional work, always a slow process and much of it unproductive, was now largely over, and in the next two years the rate of development would increase.

Ninety per cent of the first £50 millions had been spent or allocated for housing and main services. In England and Wales up to the end of February 3,666 houses had been completed, 5,802 were under construction, and contracts had been let but not started for a further 3,769. Now, with building proceeding more rapidly, it was hoped to complete 3,810 houses in the next six months alone, and in a year or two to reach a rate of well over 10,000 houses a year in the new towns. The remaining 10 per cent of the first £50 millions had been committed mainly to industrial purposes—shops, commercial buildings, and the site works necessary to open up new industrial areas. A modest start was also being made this year on some of the town centres. This 10 per cent also included general development expenses.

Much of the subsequent discussion was concerned with past administration. Mr. Macmillan, in a short reply to it, said that in one way or another the new towns areas would have to contribute to the overspill population problems of the great cities. He indicated also that he was considering by what means, administrative or other, they could press on to get the full reward and development of these ventures. It should be possible or neces-

sary he would not hesitate to ask Parliament for amending legislation, but that could not be done at this stage in an already crowded session.

### Local Control

Mrs. Eirene White asked the Minister of Housing and Local Government what arrangements he had made to inform himself of the number of local housing authorities which required builders of houses under licence to observe the standards laid down by the National Housebuilders Registration Council, as recommended in the appendix to the circular issued by his department on November 27, 1951. Mr. Marples answered that the Minister considered that this was a matter which should be left in the hands of the local authorities. Mrs. White asked what possible assurance the Minister could give in that case that the public would be protected from low standards of building. Mr. Marples replied that the local authorities were the agents in this matter, and Mr. Macmillan was a firm believer that "the gentleman in Whitehall" did not always know best. (April 1.)

Sir Waldron Smithers asked the Minister of Housing and Local Government if he would remove all restrictions on the building of houses, except that, while the housing shortage prevailed, no house shall exceed £1,500 or contain more than three bedrooms, subject always to the submission to local authorities of plans and amenities. Mr. Marples said that Mr. Macmillan hoped progressively to achieve greater flexibility and freedom in the building of houses. They had already made considerable progress in this direction. (April 1.)

### Charge on Development

Mr. John Arbuthnot asked the Minister of Housing and Local Government to investigate the fact that a substantial number of private house building licences were being returned to local authorities because the applicants could not afford the development charge; and if he would rectify this, Mr. Marples informed him that the Minister was already investigating the general question of development charge in all its aspects as part of the review of the financial provisions of the Town and Country Planning Act, 1947.

### Softwood Imports

Mr. Hector Hughes asked the Secretary for Overseas Trade, in view of the fact that purchases of timber supplies were now in the hands of private traders, what control or check was kept on imports of timber and other materials required for house building. Mr. Henry Hopkinson stated that every softwood importer made a monthly return of the contracts he had placed with overseas suppliers and the timber he had imported during the month. Information was thus obtained well in

advance about the supplies which would be coming into the country. Appropriate distribution of imports between housing and other uses was secured by the licensing of consumption. He understood that broadly similar arrangements apply to other scarce imported materials required for housing.

He informed Mr. Braine that in 1950 softwood imports, including boxboards, railway sleepers and poles, were 871,789 standards on Government account and 29,662 standards on private account. In 1951 the imports were 902,606 standards on Government and 849,439 standards on private account. (April 1.)

### Plant Hire Rates

Lt. Col. Bromley-Davenport asked the Minister of Works whether he would, in the near future, revise or abolish the Statutory Instrument laying down the charges which may be made by contractors for the services of mechanical excavators, bulldozers and so forth. Mr. Eccles stated that he was reviewing the statutory control of plant hire rates to see whether and when it could be discontinued, and hoped to reach a decision shortly. (April 1.)

### Unemployed

The Minister of Labour gave the following analysis on April 1 of unemployed male labour in the building industry registered in Greater London in February this year and last.

Occupation	1952	1951
Carpenters and Joiners	488	202
Bricklayers	152	107
Masons	5	5
Slaters and Tilers	66	35
Plasterers, etc.	261	123
Painters and Decorators	4,042	2,908
Plumbers, Gas Fitters, etc.	210	104
Glaziers	32	50
Builders' and General Labourers	2,352	1,732
All other occupations	911	623
Total	8,519	5,889

The corresponding totals for the United Kingdom were 39,301 and 31,825.

### Self-Builders

Mr. Braine suggested that people who wished to build their own houses and who possessed the necessary materials should be permitted to do so without a licence. Mr. Marples said that, with the increase in the ratio of private to council houses, local authorities should be able to deal with any such cases on their merits. Mr. Braine protested that authorities were not doing so, and Mr. Marples promised to investigate any details Mr. Braine sent him showing that there were unused resources of materials and labour. (April 1.)

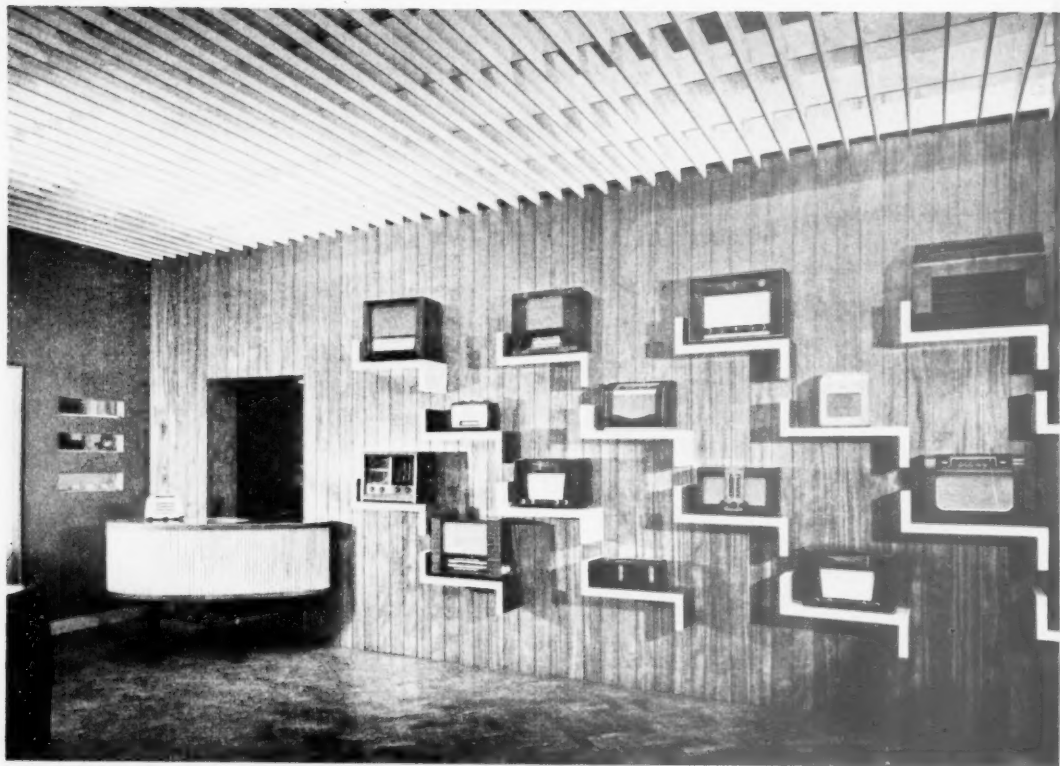


## Shop at Edmonton

architect:

PATRICK GWYNNE

THE remodeling of this pair of shops at Edmonton was primarily influenced by the owners' conviction that the sales of radio and television sets depend in the main on showing the largest possible range of sets—backed by a good reputation for servicing. It seems that the majority of buyers, especially of television sets, indulge in prolonged window-shopping before they venture into a particular shop, and by that time they have often decided what they want. Personal



Adjustable hook-on shelves for table radio sets are painted either yellow, lime or dark green, with white edges. Mahogany walling was made in sections, independent of walls and encloses recess for storage of small articles. Counter is mahogany with beech strips and glass top and shelf, illuminated under.

salesmanship will then, of course, become influential, as will good demonstration facilities, but in many cases the real sale is made, so to speak, in the street.

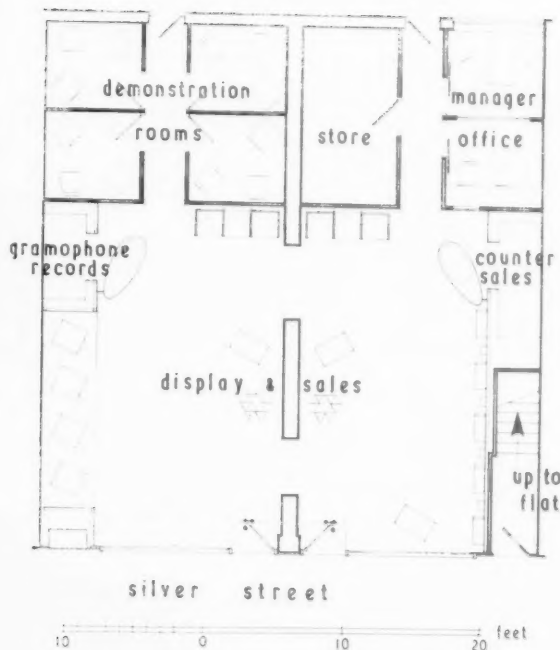
#### Choice of Window Line

Several arrangements of shop front were investigated. A set-back window line and a two-level display were both considered, but it was found that the necessary range of sets could only be shown if the whole floor area was used, and that for convenience most of them should be at floor level. The layout adopted, therefore, which was also strongly favoured for reasons of cost, places the windows on the street and forgoes the advantage of shelter which a set-back might provide, so as to preserve every inch of display space.

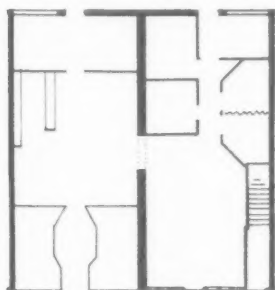
#### Creating an Atmosphere of Efficiency

The straightforward layout which resulted has been carried through the whole shop

[continued on page 457]







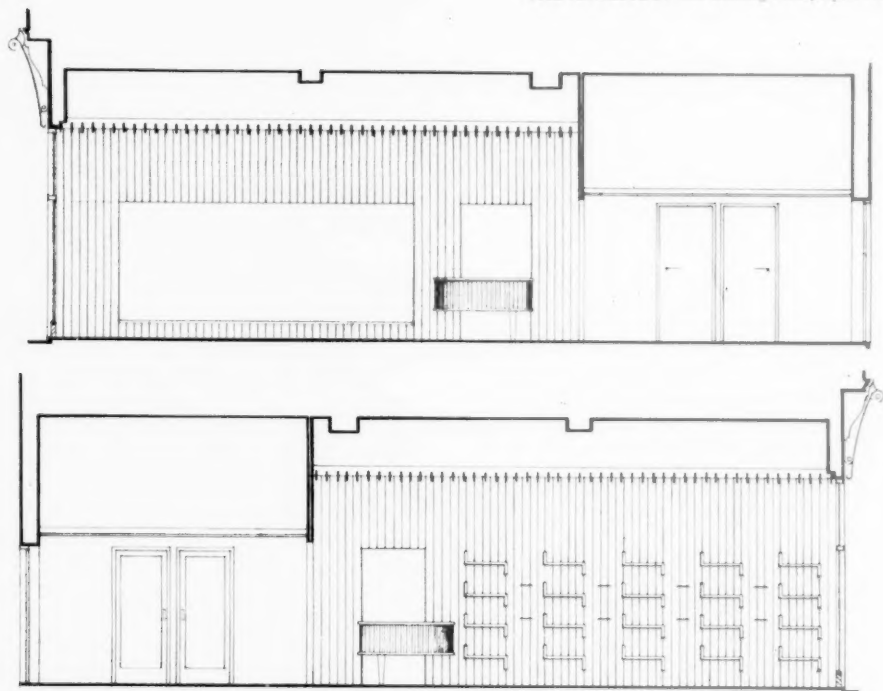
The shops before alteration

Sheet steel fascia, stove-enamelled white, has cut-out letters which show dark by day and, by illumination of strong red background, give the opposite effect at night. Additionally, the full extent of the fascia is emphasized at night by a concealed blue light along top scroll. Full-height opening between shops at front is new and was maximum allowable; rear opening existed. Suspended ceiling is of light wooden slats sprayed white.

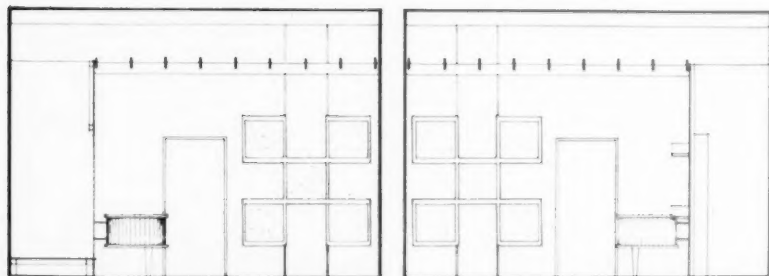
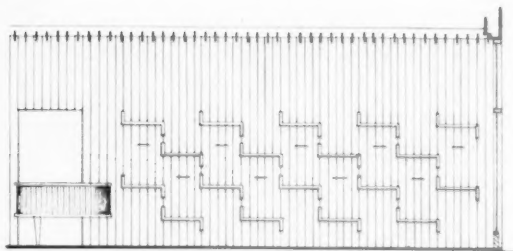


For table-type television sets, these display units are mounted on pairs of tubular supports set into floor and into blocks fixed to ceiling. Compartments are lined with cherry-red felt and each is illuminated. Background wall is indigo.





part elevation showing  
an alternative arrangement  
of the display shelves



SHOP AT EDMONTON designed by PATRICK

as strictly as possible so as to promote, together with a simplicity of detailing, an efficient-looking atmosphere. The on-lookers' confidence in the firm and its ability to provide good service and facilities is further sought by making the premises appear as extensive as possible. The fascia is carried across the whole façade, covering an existing pilaster, to include the side door, which is treated as part of the shop front. Inside, the suspended ceiling, carried through a new full-height opening (the maximum width allowable), assists in making the two original shops appear as one large one.

#### Effects to Stimulate Interest

The internal design, however, is mainly concerned with overcoming the monotonous and perhaps confused effect of a mass of radios, radiograms and television sets. The majority of cabinets are much alike—wooden boxes of various sizes, so to speak—and it seemed necessary to provide a means of grouping and dramatizing particular sets. Certain display features have purposely been designed to form an over-riding pattern in order to stimulate interest and set off to advantage models which might otherwise be overlooked. A recessed platform on one side gives a grouping for "console" type television sets, and adjustable shelves on the opposite wall carry table radios. Against a dark rear wall table television sets are housed in a pair of display units of forceful shape and strong colour to attract attention to the back of the shop. These arrangements leave the main floor and immediate window space available for mixed displays.

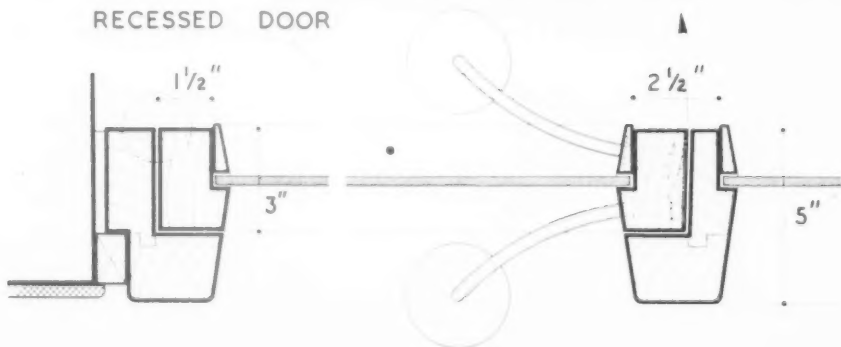
#### Contractors

Shop front :	H. George.
Fascia sign :	L. Bloom.
Ironmongery :	J. D. Beardmore & Co., Ltd.
Interior fittings :	L. Bilsby, Ltd.

Frame of door is contained within main window framing so as to reveal clean outline. White cellulosed wooden grips revolve on bronze lacquered rod supports. Doors are locked by long-shanked key through slot in main frame.



#### RECESSED DOOR



# LIBRARY for the National Institute of Economic and Social Research

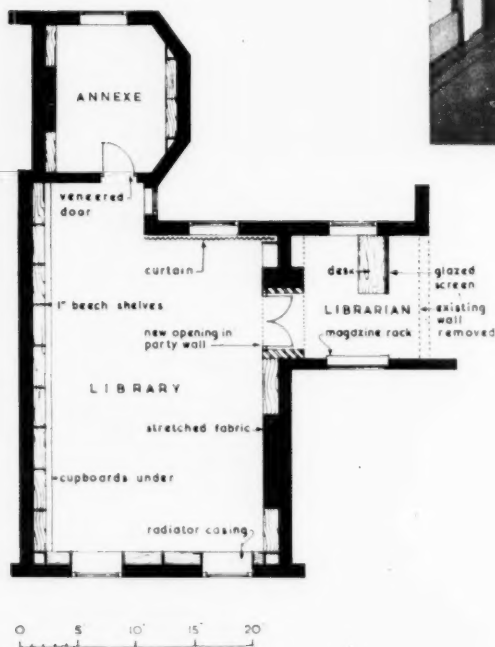
DESIGNERS:

MISHA BLACK

JOHN DIAMOND

Design Research Unit

THE building adjacent to the National Institute of Economic and Social Research in Dean Trench Street, Smith Street, S.W.1 was derelict, and the subject of a war-damage claim. It was decided to enlarge the Institute's premises by converting the two buildings into one. The staircase of the damaged building was removed and the entire first floor became a library, entered through a librarian's room in the original premises by a new opening in the party wall. The librarian's room was formed as an extension to the staircase hall by the removal of a timber partition, and contains the librarian's desk, protected from view by a glazed screen, the library index, and an illuminated magazine rack with glass shelves, which was constructed within the architrave of an existing door.



View through the Librarian's Room to the Library beyond. The magazine rack on the left is built within an existing architrave, and has glass shelves and a grey felt backing. On the right is the glazed screen to the Librarian's desk, with cupboards under.

The adjustable library shelves are faced with beech, and are planned round three sides of the room. On the long wall they are combined with projecting cupboards under, and on the window wall with deep window reveals with radiator cases under. On the party wall the old fireplace was blocked up, and the chimney breast was covered with fabric to form a setting for a painting by William Coldstream.

The windows, and the remaining wall of the room, are hung with a curtain, the ceiling is of acoustic tiles, and the cork tile floor is laid with broken joints.

The furniture can be arranged either for normal library working, or with the addition



The Library arranged as a Conference Room by the addition of loose leaves to the tables. The old chimney breast has been covered with fabric, made by Tibor Ltd., with metal woven into it, as a setting for a painting by William Coldstream.

Detail of the furniture. The table is of polished beech, with a grey Vynide top, and the chairs are upholstered to match the curtains. The table was specially designed while the chairs are a standard type designed and manufactured by Goodearls Bros. Ltd. The specially designed table lamp with beech pen-tray base, is by Oswald Hallman Ltd.

of loose-leaves the library can be arranged as a conference room to seat 25 people. The tables are of beech with a grey Vynide top, and the chairs are upholstered in a green fabric to match the curtains.

The architects were Misha Black, O.B.E., F.S.I.A., M.Inst.R.A., and John Diamond, B.Arch. A.R.I.B.A. of Design Research Unit, and the surveyors were Debenham, Tewson and Chinnocks. The general contractors were F. W. Clifford Ltd., the fabrics by Tibor Ltd., of Stratford-upon-Avon, the light fittings by Troughton & Young (Lighting) Ltd., the acoustic ceiling by Horace W. Cullum & Co., Ltd., and the cork tile floor by the Armstrong Cork Co. Ltd. The furniture is by Goodearls Bros. Ltd. of High Wycombe.



# DROYLSDEN SECONDARY MODERN SCHOOL for Lancashire County Council



*The Assembly Hall*

**T**HE Droylsden Secondary Modern School for girls was awarded the bronze medal of the Manchester Society of Architects as the best building in their area to be completed during the period 1949-51. This school, which is designed to accommodate 680 pupils, was commenced in September, 1948.

The Architects responsible under the direction of the County Architect, G. Noel Hill, F.R.I.B.A., M.T.P.I., were R. N. Guy, A.R.I.B.A., C. H. Simmons, A.R.I.B.A., S. G. B. Roberts, A.R.I.B.A. and C. C. Bowring, A.R.I.B.A.

## Site

The site covers an area of 17½ acres in an industrial-residential area. The main school buildings are sited on a plateau at the north-eastern end, the ground sloping

away from the school buildings towards the main access road at the front and to the boundary at the rear.

## Plan

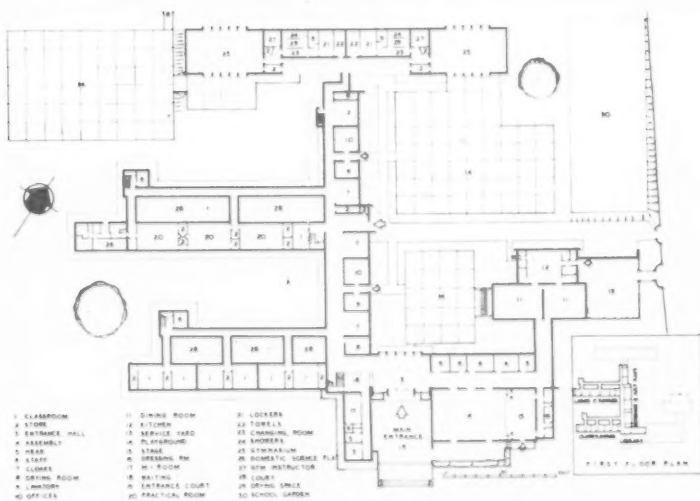
The school is planned with a main spine block having a north-west-south-east axis, and consisting of cloak-rooms and lavatories on the ground floor and practical rooms on the first floor. The two two-storey classroom blocks extend at right angles on the south-western side of the main spine, giving a south-east aspect to the classrooms, the latter having "elbow" access type of corridors. The Main Entrance Hall, Assembly Hall, Kitchen and Dining Room have been planned on the north-east side of the main spine.

Advantage has been taken of the rise from the main access road in designing the Main Entrance which is

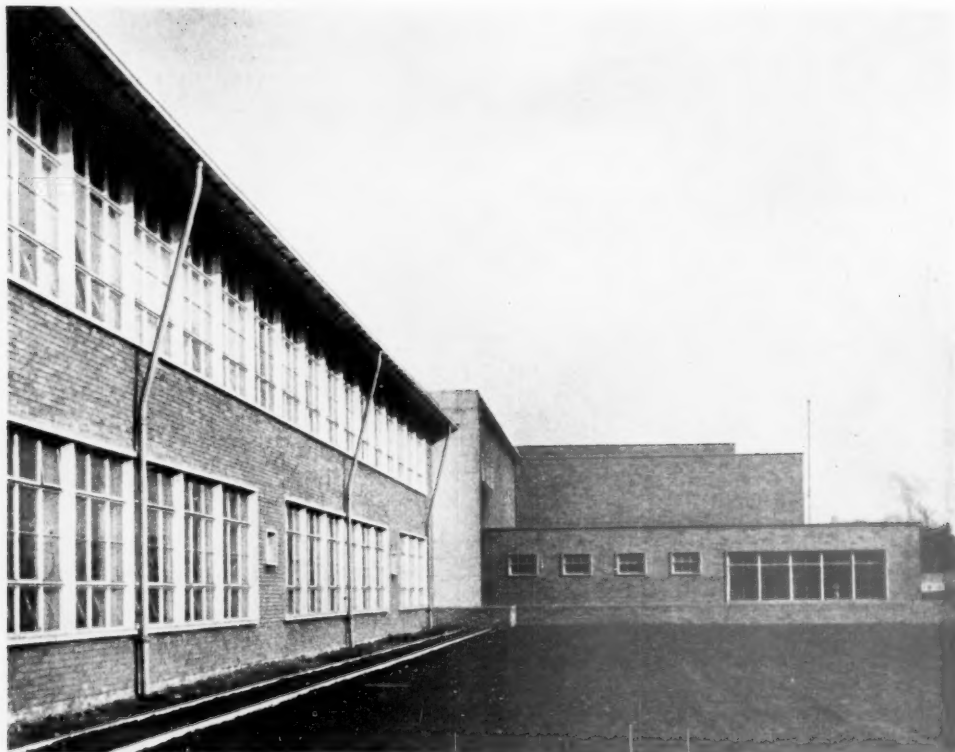
*[Continued on page 462]*



The Main Entrance







One of the classroom blocks

approached by a wide flight of steps flanked on one side by the Administrative Block and by the end wall of the Assembly Hall on the other.

#### Construction

The main spine, foyer, library and the two classroom wings are of steel framed construction. The gymnasium, classroom corridors, Assembly Hall, Kitchen and Dining Room are built in load bearing brickwork. Floors and flat roofs are of concrete construction, whilst the pitched roofs are of wood-wool insulation on steel purlins. All roofs are finished with green mineralized felt. In the two-storey classroom wings the first-floor slab construction has been insulated against sound transmission. The facing brickwork is golden-brown in colour.

#### Finishes

Floors generally are of wood block. Stairs, lavatories and w.c.'s—terrazzo, and the gymnasium—hardwood strips on wood joists. Suspended ceilings to classrooms are of fibre board, and ceilings to gymnasium, foyer and Assembly Hall are plaster on metal lathing.

#### Heating

The heating is by low pressure hot water with oil-fired boilers electrically controlled. Recessed convectors are installed in the foyer, Assembly Hall and on the staircases.

#### DROYLSDEN SECONDARY MODERN SCHOOL

General Contractor: Messrs. W. Townson & Sons, Ltd., Bolton.

Clerk of Works: Mr. D. R. Ollerton.

#### List of Sub-Contractors:

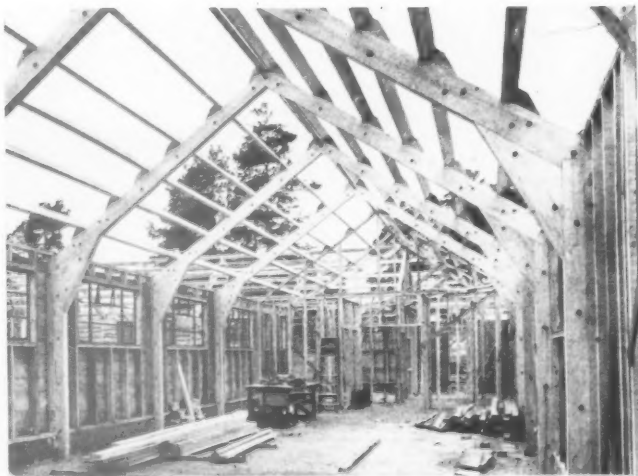
Structural Steelwork: Messrs. Robinson & Kershaw Ltd. Hollow Tile Floors and Roofs: Precast Concrete Units: Messrs. Matthews & Mumby Ltd. Insulated Panel Roofs, felt Roofs and D.P. Membrane: The Ruberoid Co. Ltd. Precast Concrete Windows: Messrs. J. A. King & Co. Ltd. Sika Waterproofing: Messrs. W. J. Harries Ltd. Anti-Condensation treatment: Decorators (Liverpool) Ltd.: Messrs. Turners Asbestos Cement Co. Ltd. Suspended Ceilings: Building Insulation Contractors Ltd.: Tenest Fibre Board Co. Ltd. Sanitary Goods: Associated Clay Industries Ltd. Lantern Lights: Crystal Manufacturing Co. Ltd. Fabric Reinforcement: Ferrocon Engineering Co. Ironmongery: Messrs. Laidlaw & Thomson Ltd.: Messrs. J. Gibbons Ltd.: Messrs. P. C. Henderson Ltd. Boundary and Ornamental Railings, etc.: Messrs. Wm. Gratix & Sons Ltd. Staircase Balustrades, etc.: Messrs. W. & R. Leggett Ltd. Piling: Pressure Piling (Northern) Ltd. Metal Windows: Res Metal Casements (1932) Ltd. Glass Domes: Messrs. Pilkington Bros. Ltd. Cement Glaze: Robbs Cement Enamel Finishes Ltd. Metal Faced Doors: Venesta Ltd. Acoustic Tiles: Messrs. Wm. Beardmore & Co. Ltd. Metal Door Frames: Messrs. H. Hope & Sons Ltd. Cloakroom Equipment: Cloakroom Equipment Ltd. Steel Doors: Messrs. J. Booth & Sons (Bolton) Ltd. Lighting Conductors: Messrs. W. J. Furse & Co. Ltd. Plastic Lettering: The Lettering Centre, London. Aluminium Fascias: Messrs. John Thompson Beason Windows Ltd. Terrazzo Floors, W.C. Partitions, etc.: Messrs. Canways (Tiles and Terrazzo) Ltd. Wood Block Floors: Messrs. J. Gerrard & Sons Ltd. Fire-Fighting Equipment: Messrs. Mather & Platt Ltd. Mr. J. E. Mercer. Germanium Equipment: Messrs. Niels Larsen & Son Ltd. Steel Shelving: Messrs. P. S. Runnals & Son Ltd. Fittings: Messrs. J. Gerrard & Sons Ltd.: Messrs. W. Fearnley & Sons Ltd. Furniture: Messrs. Southern Bros.: Messrs. H. J. Berry & Sons Ltd.: Messrs. Motique Industries Ltd.: Messrs. Story & Co. Ltd. Educational Supply Association Ltd. Heating Installation: Messrs. Hopes Heating & Engineering Co. Ltd. Electrical Installation: Messrs. W. Townson & Sons Ltd. Broadcast Equipment: Communications Systems Ltd. Bells and Master Clock System: Gent & Co. Ltd. Stage Lighting: The Stage Electrical Equipment Ltd. Stage Equipment: Messrs. Watts & Cory Ltd. Playing Fields Development: Messrs. Bradshaw Bros. Ltd. Tennis Courts: Messrs. Buxtonous Surfacing Ltd. Lawns and Shrubberies: Messrs. Maxwell M. Hart (Glasgow) Ltd.



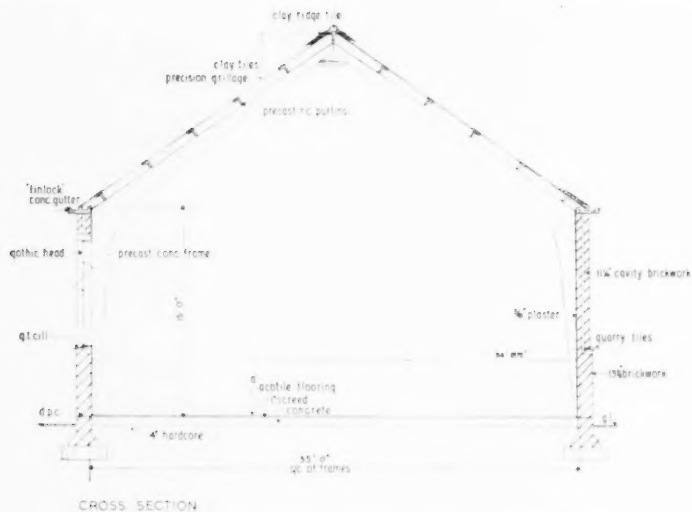


Progress detail of the Congregational Church at Bromley, showing pre-cast reinforced concrete portal frames in position with side walls practically completed. Temporary spacers position the apse end frames. All frame-work was cast on site and a purlin mould can be seen at the bottom right-hand corner. Details of the system are given overleaf. Consulting Engineers & Architects : C. W. Glover & Partners.

## PORTAL FRAME CONSTRUCTION FOR A CHURCH



Work in progress on a temporary timber church on the L.C.C. Estate at Sheerwater, Woking. Architect T. Carr, F.R.I.B.A. The portal roof trusses in this case are made from laminated wood and make interesting comparison with the steel reinforced concrete trusses shown above.



CROSS SECTION

PORTAL  
FRAME  
CONSTRUCTION  
FOR A  
CHURCH

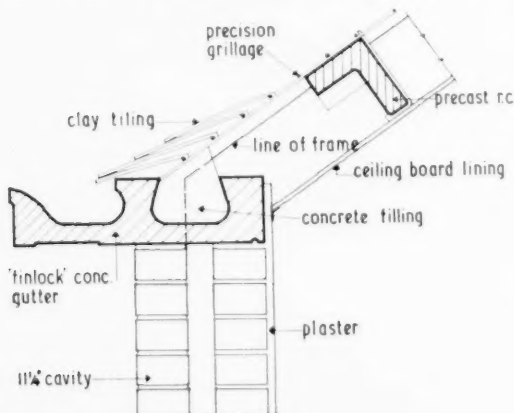
THIS article illustrates a form of construction originally evolved to meet the wartime shortage of steel and timber and which has since been widely used in the construction of post-war churches and other buildings, of which over a thousand have been erected to date.

The system, which was designed by C. W. Glover and Partners, Consulting Engineers, has produced some remarkable saving in overall cost and in particular that of steel. The shed-type building in structural steel designed for light roof coverings normally uses approximately 7 lb of steel per square foot. The D.S.I.R. reported in their wartime Building Bulletin No. 2 that the various forms of reinforced concrete construction

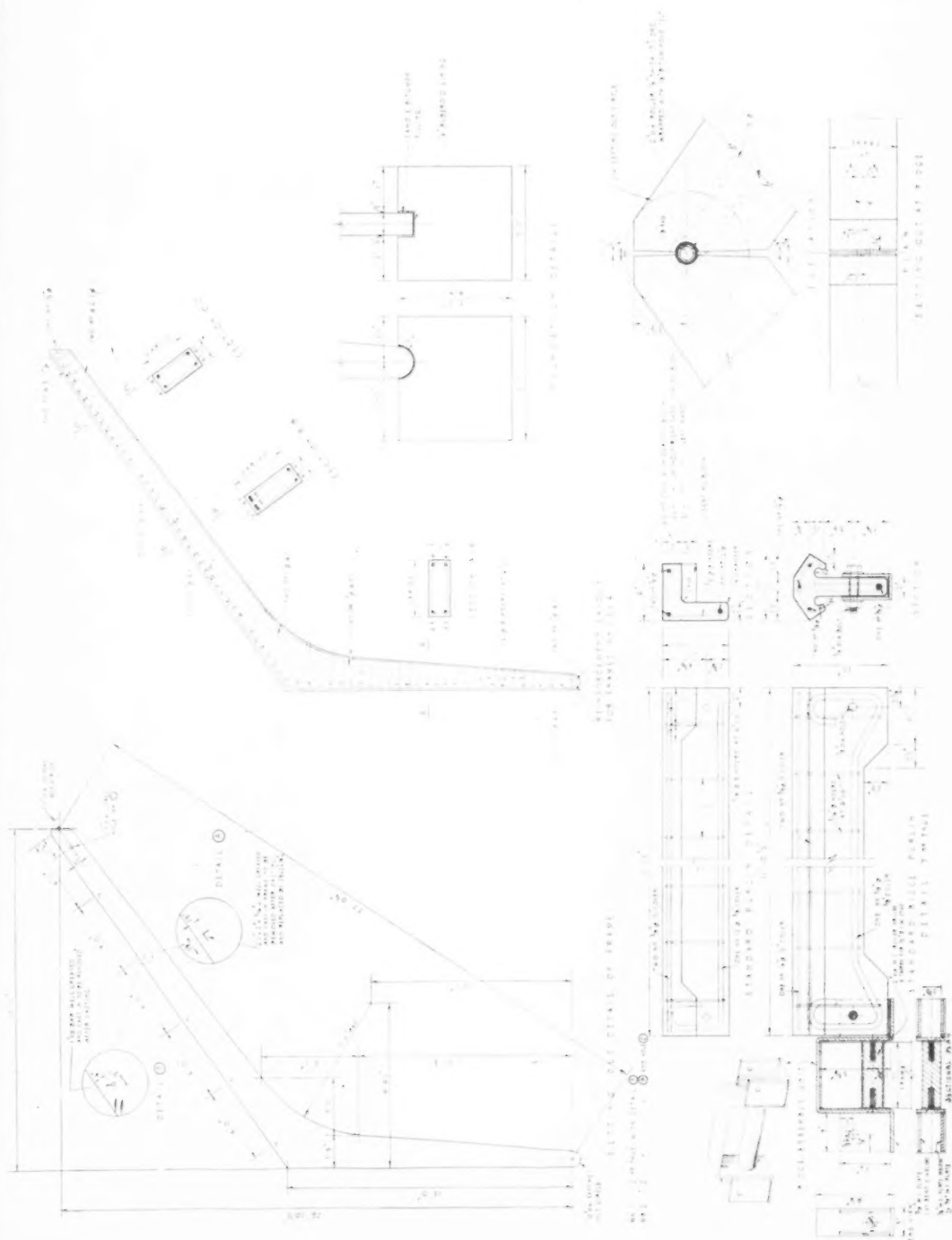
averaged 6 lb of steel per square foot floor area. The system described in this article reduced this down to  $2\frac{1}{2}$  lb per square foot floor area. And now by the use of pre-stressed concrete which can also be applied to the 3-pin portal frames, this has been reduced to 1 lb per square foot. This data applies to 60ft span, 15ft to the eaves.

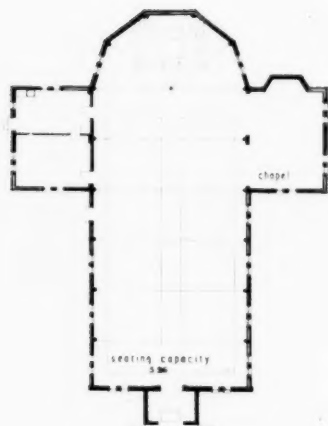
The pre-cast reinforced concrete portal frames are cast on the site in moulds which consist of sides only. Bays may be of any dimensions but preferably 15ft, with spans varying from 20ft to 90ft maximum. The roof purlins are standard irrespective of the size of the building and are factory-

produced at low cost. As an alternative to the plain gable wall, the frames can be arranged around a central rose to form an apse suitable for a church. Walls can be built up in any suitable material in panels around the framework, while floors, ceilings and finishes may be suited to the design. The roof is lined in insulation board on aluminium Tees, suspended from the pre-cast reinforced concrete purlins. These purlins will support precision grillage to carry roof tiling on felt underlay or in cheaper work ordinary asbestos cement sheeting.



1" SCALE DETAIL AT EAVES.

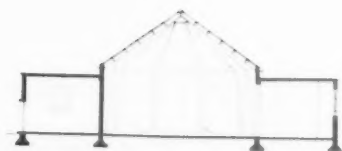




plan



St. Thomas More Church, Erith



SECTION

Interior view of the St. Thomas More Church showing formation of side Chapel with pre-cast portal frame units. Designed by C. W. Glover and Partners.



PORTAL FRAME CONSTRUCTION FOR A CHURCH



# The Education of Architects

## THE FIRST OF A SERIES OF ARTICLES BY

### J. BRANDON-JONES, A.R.I.B.A.

#### INTRODUCTION

THE present system of architectural education in England has called forth a growing volume of criticism during recent years. Many of the loudest complaints come from students and from young architects fresh from the schools, but it would be both unfair and unwise to treat them with contempt on the grounds that they come from people too young and too inexperienced to know what is good for them. The mere fact that a number of intelligent and enterprising students are unhappy and lack confidence in their teachers is in itself a sign that all is not well. Students are seldom qualified to make constructive proposals for their own education but they can tell us where the shoe pinches and their criticisms are worthy of careful investigation. At the same time the schools are under fire from senior members of the profession who consider that school-trained men are not such good value as assistants as they ought to be. Here, again, while some of the criticisms must be given serious consideration, the remedies proposed often display a complete ignorance of the problems facing the teacher and suggestions are sometimes made that seem to indicate a peevish demand for speedy and accurate tracers willing to work at cut rates rather than a genuine concern for the future of the architectural profession.

On both sides there will be found a certain number of critics who maintain that the schools as at present constituted are completely useless and who would advise us to start again from scratch, forgetting completely the work of those who during the last forty or fifty years have devoted so much time and thought to the teaching of architecture. I think that this attitude is wrong. Mistakes have certainly been made and many of them have been unnecessarily perpetuated. Teachers have sometimes failed to make the best use of the facilities available in universities and schools, but we cannot afford to condemn or to discount everything that has been done by the men who built up the schools because some of their experiments failed or because unimaginative underlings have muddled and misinterpreted the things that they stood for. The most perfect system or curriculum can be wrecked by a stupid staff, but on the other hand a group of intelligent and patient teachers can produce good results under apparently impossible conditions. One of the most important factors is the relationship between the individual student and his instructors, and in the last analysis the weakness of many schools lies simply in the inability of the teachers to teach.

The proof of the pudding is in the eating—and in judging the schools it is necessary to examine not only the portfolios of students and the designs submitted for Institute Prizes, but also the work of past students now in practice. A study of buildings designed by school-trained architects certainly exposes some surprising gaps in practical knowledge, mistakes are frequently made which would never have been allowed by a competent architect of a generation earlier and a deal of time and money is wasted in producing new and expensive solutions to problems that were

solved in far simpler ways by our predecessors. Some of the difficulties are of course due to present shortages and to deficiencies on the part of the craftsman but too many are due to lack of knowledge on the part of the architect and incompetent supervision. That good work is possible to-day in spite of all handicaps is proved by visits to recent buildings designed by members of the older generation who have not forgotten the elements of building that were kicked into them in their pupillage. We may consider that designs look trumpery but we can't afford to laugh at their detailing and finish and even the plans sometimes work at least as well as those of their more fashionable juniors.

In addition to lapses on the technical side the work of the school-trained architect often exposes a curious lack of the balance and sense of relative values that form the basis of first-rate design. Too much attention is paid to points that only tell on paper and not enough to subtleties of texture and finish that count for everything in an actual building. It is inevitable that this should be the case in the first few buildings designed by a man who has spent five years working at a drawing board without the advantage of seeing his work in three dimensions, but it is disappointing that so many men continue to make the same mistakes years after leaving the school and apparently continue to take their ideas direct from the photographs and drawings in architectural magazines without checking them against the appearance of buildings that have been tested by a few years' exposure to the English climate.

IS it any use trying to teach architecture in a school or a university? During or immediately after my own student days I might have answered, "No—but you don't go there to learn about architecture, you go to a school because, for those who can afford it, it is the easiest way of slipping past the R.I.B.A. Examinations." Ten years later when I began to teach, I was still almost as cynical, but thinking the matter over in a period of enforced detachment I no longer damn all schools without qualification. I still believe that it is impossible for a school to turn out ready-made architects, but I am prepared to admit that it may be possible for it to direct a student towards a state of mind that will enable him to make himself an architect. The schools and their critics must first realize their limitations and then try to make the best use of their advantages.

It is obviously of fundamental importance that both the students and the staff should have a clear understanding as to their respective parts in the process of architectural education, for it is essentially a two-way process and if either of the partners does not know exactly what to expect from the other there will certainly be gaps and overlaps and wasted time and disappointment on both sides.

First we must consider the aim of the architect and make certain that we are all going in the same direction. As a first statement in a few words it seems to me hard to beat the opening paragraph of

"Theory and Elements of Architecture" by Atkinson and Bagenal:

"The aim of the architect is to build well and simply under difficult and complex conditions. He cannot do this without knowledge, for, however talented he may be, no grown man can build—once upon the nursery floor—without any reference except for his own fancy."

"An architect who ignores what has been done in the past is in danger of wasting his time solving problems—structural and artistic—which have been solved already."

"Further experiments are continuously necessary, but a solid foundation of knowledge is required before we know whether our 'New' ideas are indeed new and not old and long ago discarded."

Now as to teaching, let me quote again, this time from the original syllabus of the Board of Architectural Education:

"It is recommended that the syllabus be governed by the principle that construction is the basis of architecture and by its correlative principle that architecture is the interpretation of construction into forms of aesthetic value. The student should therefore be trained primarily in construction, that is in the composition of form and the use of materials best adapted to meet a given problem without regard to distinctive styles."

"He should be taught to understand that legitimate architectural form is the result of the application of the intelligence to actual and specific problems."

"The object of training is to educate the student's thinking faculties."

The Architectural school as we know it to-day is a comparatively recent innovation, the full-time day school exempt from the R.I.B.A. Examinations only got into its stride after the 1914-18 war, and it is still in an experimental stage. Forty years ago the normal training was an apprenticeship under a practising architect, the pupil picked up a knowledge of everyday routine as he went along, he read or studied at night school the History and Theory of Architecture and the elements of mechanics. If he was in a good office he was perhaps encouraged to try his hand at design in the student competitions of the R.I.B.A. or in competitions organized by the local society of which his master happened to be a member.

The apprenticeship system is slowly dying out but it still exists and a very strong case can even yet be made out for an "office" training; certainly it brought the pupil into close and immediate contact with older architects and with practical building in a way that a school can never do. On the other hand there is one snag which is at present so serious that the majority of students have no choice but to attend a school, the difficulty of course is that there are not enough first-rate architects in practice to-day to provide a satisfactory training for the number of students entering the profession. It is without doubt better to be a pupil in a good school than a pupil in a second-rate office.

Admitting therefore the regrettable necessity for schools of architecture we come to the further question—How are we to make the best use of our time and what

[Continued on page 469]





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E.I

can the student expect to get from his school?

The school at least can provide a roof under which to work, a minimum space in which each man can park his board, a sink, a shop for drawing materials, a library and a series of lectures from older architects who try to pass on the deductions made from their own experience and study. More important than these advantages is the fact that the school can give each student a chance to meet and work with others of his own age, to debate common problems and to try one another's strength. A single pupil, even in the best of offices, suffers from many of the disadvantages of an only child in a family of grown-ups.

When I joined a school after two years as a pupil in an architect's office I at once began to condemn the "unpractical" nature of the work, complaining that working drawings were not close enough to office practice and informing anyone who would listen to me that insufficient attention was paid to economy of construction and to getting the maximum lettable area on to a given site. In those days I did not know enough about education to realize that the teaching of theory is the thing in which a school should specialize because it is the thing that a school can teach and that an office never teaches.

The common method of teaching by "Problem" and "Criticism" has gradually developed as the schools have developed, the theory behind it is that you can best learn to design by trying to design, and it is in the opportunities it gives for the student to make his own mistakes that the school has the advantage of the office, a point that is not always appreciated by practising architects when they look at the work produced in the schools. It was many years before an artful pupil was allowed to try his hand at designing a complete building and some considerable time before he was even allowed to design a detail such as a fireplace or a staircase handrail; he started by colouring other people's drawings and by making tracings and gradually worked from minor details onwards to the general scheme of the structure, learning *how* things were done but not always knowing *why* they were done—that was simply a matter of having faith in the master! In all probability an architect trained as a pupil would have no experience of planning or composition until one day he got a job of his own and began to learn at his client's expense. Of course a wise pupil watched his master developing his plans, studied the plans in History Books, read any magazines that were available and argued with his fellow pupils and with contemporaries from neighbouring offices. Somehow or other each man had to deduce for himself an elementary "Theory of Design," but the office training was a hit or miss method. An artful pupil is usually given a job to do because it is useful to his master, not because it has any direct educational value.

The D.S.I.R. stand at the Building and Civil Engineering Exhibition, Glasgow, March 26-April 12, showed some of the work of three of its laboratories, the Building Research Station, the Fuel Research Station and the Road Research Laboratory. All of them have branches in Scotland at Thorntonhall, near Glasgow.

The use of tower cranes, which can reduce the labour spent on fetching and carrying in building houses by as much as two-thirds, was the main B.R.S. exhibit.

## LIBRARY NOTES

### "Building in England; Down to 1540"

By L. F. Salzman, Oxford, 50s.

PEOPLE whose concern lies with the most practical and matter-of-fact aspects of architecture and building will find much to interest them in this remarkably scholarly and far-ranging account of the methods and materials used by the men who gave actual reality to the aspirations and designs of those who commissioned and planned the architecture of the Middle Ages. Though the first chapter says something of the architects and master masons, and on the extent to which they were employed by bishops, abbots, kings, and others who had the ultimate and financial responsibility for the erection of churches, castles, and domestic work, the book covers comparatively little of the ground already so extensively mapped out by the researches of such writers as Mr. John Harvey. It rather sets out, with great thoroughness and as a result of immense documentary research, to be a guide to the methods, materials, costs, transport problems, and other activities of the mediaeval building trades in this country. As such it does much to clear away the miasma of sentimental romance (e.g., the idea that all mediaeval building was sound and scientific) from yet further sections of an essentially practical, commonsense subject. It is, however, pleasing to know, while one is on the subject of architects and their rough plans, that Henry VIII, in addition to statecraft, matrimony, and other pleasures, was an amateur fore-runner of Lord Burlington, and being himself responsible for the "plattes" both of a castle and a royal chapel.

But the bulk of Mr. Salzman's main text is a magnificent quarry, capable, no doubt, of extension yet profoundly adequate, of information on every possible aspect of mediaeval building. If you want to know about the organization and wages of the building trades, copious information is there to hand. There is matter on the structure of foundations, of walls, and on roofing; it will surprise some to find how universal, even in stone districts like Bath, were wattle and daub houses with roofs of thatch. Mr. Salzman makes the point that timber-framed houses were in a majority, and that mediaeval England was specially notable for the goodness of its timber roofs. As early as the 13th century there was extensive use, for a variety of purposes, of Baltic softwoods to supplement oak and other native timber, and later on the book gives almost over-detailed information on the part played by various metals, both in structures and fittings and as a reinforcement to tools whose main com-

position, thanks to the scarcity and comparative costliness of worked metals, had to be of wood. The one subject on which I found the book somewhat inadequate was that of brickwork, and the author throws little light on the little-known subject of the exterior use of paint and colour wash as a decoration and preservative of ashlar masonry and carved stone. Mr. Salzman might here have been able to get valuable data from illuminated MSS in addition to the more prosaic documents he has so industriously searched. It is, moreover, this seemingly exclusive reliance on documents that does impose a limitation on the work. The survey here presented is of unexampled and incalculable value. But it is not quite complete, for visual evidence and stylistic comparisons can in some respects, particularly for the poorly documented Norman period, add something to the evidence of parchment and paper. For example, it needs a visit to Lanthony by Gloucester to discover that there in the Severn valley there was important use, in some of the "utilitarian" buildings, of brickwork at a date not far from 1500. So, too, the book is both admirable and revealing on the completeness, particularly in the large, highly organized monasteries, of the sanitary arrangements. But a careful look at Nunney Castle is more valuable than any document should one want to see exactly what happened when one's "garderobe" debouched on to the moat.

This being the work of an eminent economic historian, it is natural to find excellent material on transport methods and costs, and it may console some modern contractors to know that transport could amount to nearly 25 per cent of the whole bill at a Cheshire Abbey in the 14th century. More unexpected is some information on building regulations. London had them, as a measure against fires, as early as 1212.

For good measure the author prints 58 pages of texts that are relevant to mediaeval building operations; those of Saxon and Norman date are of special value as at that time they are the only written evidence. Still more impressive are the verbatim texts of 123 building contracts and agreements; they cover houses, castles, colleges, churches of all kinds, and include one of 1478 for a malhouse at Exeter. A defect, however, is the lack of a properly co-ordinated bibliography.

BRYAN LITTLE.

### Towns and Buildings

by Steen Eiler Rasmussen. Liverpool University Press. Price 21s.

IT is difficult to know for what public this most attractive book has been produced. It is a translation

from the Danish, an adequate one, but the language and ideas are very simple and generalized—almost as if for children, perhaps the children of Liverpool University? At first glance it seems as appetizing and scholarly as a work by Mr. Summerson, who can enthral and instruct both the lay and the initiated. The delightful and accurate drawings and the imposing menu on the title page suggest this comparison, but the text soon disappoints.

Mr. Rasmussen traces the growth of cities from Peking, where the layout was determined by religious rules, to the more haphazard growth of European towns. Paris, London, Rome and Vienna are discussed with some detail; the various stages of development being illustrated by excellent scale plans. The necessity for fortifications, lasting on the Continent into the nineteenth century, and their constricting effect, is contrasted with the spread of English towns, where fortifications were not required after the Middle Ages.

The influence of painting on architecture is illustrated by Raphael and Palladio and the remarks on Danish and Dutch architecture, less well known to us, show how much delight and instruction Mr. Rasmussen could give, if he would leave the generalities and confine himself to narrower and more specialized fields. G. H.

### Roman Sources of Christian Art

By Emerson H. Swift; Columbia U.P., N. York, and Geo. Cumberlege, Oxford U.P., 1951. xx + 248 pp., 48 pls and 66 figs. \$10.00.

**T**HIS book is an up-to-date assessment of an old battle-ground which was brought to the forefront of modern academic discussion by the works of Strykowski some fifty years ago.

Many tides have flowed up the Golden Horn and much water has slipped silently beneath the arches of the Pons Aelius during that half-century and it is time that re-examinations were made into the origins of the arts of the Christian Church after the days of Constantine.

Professor Swift brings together much scattered evidence—some of which is very recent—and attempts a reasoned correlation of the work of Many "romanists," some of whom are all too little known to the general reader, even of history as opposed to the history of art and architecture; to mention, almost at random, the names of Giovannoni, Ravoir (Rushforth), Morey, Mrs. Strong and the recent British work in North Africa led by Ward Perkins is to give point to this appraisal of the present book; it is indeed an exhaustive essay and as such demands detailed reading, discussion and criticism. The parts that will

prove of particular interest to architects are those concerned with the related structural developments of Byzantine and other early Christian buildings.

The book is well produced, with good typography, clear textual illustrations (mostly specially drawn) and the plates are excellent reproductions of photographs and engravings. The fact that some of the photographs are somewhat old is generally no detraction, though more recent ones of the interior of Hagia Sophia would be a real asset. An excellent bibliography is included. S. R. P.

### The American House To-day

85 notable examples selected and evaluated by Katherine Morrow Ford and Thomas H. Creighton. Reinhold Publishing Corporation, price 64s.

**T**HE "blur" says that "the authors probably know as much about the kind of houses that people want to live in as anyone in the United States." It is certainly a very nice book, well illustrated with 380 photographic reproductions and 120 plans of houses designed by such well-known architects as Pietro Belluschi, Marcel Breuer, Philip C. Johnson, George F. Keck, William Lescage, Richard Neutra, Edward D. Stone and Associates, Paul Thiry, Hugh Stubbins, Jr., and many others whose work is familiar to those of us who see American architectural journals.

To British eyes these 85 designs use timber—or lumber, I suppose I should say—so lavishly that they can have only an academic interest at this time.

The designs selected by the authors show that certain mannerisms are having quite a long run.

The rubble internal walls, huge expanses of glass, vertical timber cladding, monopitch roofs are still going strong.

The modern style has spread rapidly in the U.S. and appears to be suitable to the extreme climatic conditions and dramatic sites in that Continent.

The necessary thing for this kind of house appears to be an empty landscape, however remote or wild. The very beautiful photographs emphasize this isolation or disguise very cleverly the presence of any neighbouring buildings. There is a farmers' saying that a sheep's worst enemy is another sheep. It could be paraphrased to apply to houses!

The plans spread. The kitchens are compact. The bathrooms are plentiful and generally the internal planning expresses the extraordinary American capacity for living without privacy.

Many houses have the words "servant" or "maid" on them, so presumably such persons still exist in those parts. The carports, of course, have

grown to be as large as grandfather's stables used to be.

What greatly helps the appearance of these houses is the way they squat on the ground without the fuss and distraction of fences and gardens, and they therefore fit into the landscape, so that it is possible to drive one's car straight out and away like a cowboy leaping on his bronk and riding off in a cloud of dust. Lucky people, lucky architects. Density is all (though, of course, money helps, too).

The work of over 70 architects is illustrated, and the text deals with the design of houses under the heading of: The Program; The Site; Space Organisation; Environmental Influence; Construction and Materials; Appearance. A further chapter dealing with failures and problems arising from this form of design would have added to the value of a valuable and well-produced book.

N. M.

### The Modern Factory

By Edward Mills, F.R.I.B.A. The Architectural Press, London, 30s.

**I**NDUSTRIALISTS as well as Architects will find much useful and common-sense information packed into the 189 pages of this up-to-the-minute book by an author who is an experienced practitioner in the realm of his subject.

Presented in an attractive dust jacket designed by Donald Dewar Mills, the book deals with the subject generally under the heading Siting and Layout, the Factory Estate, the Architect's Instructions. Three chapters are given to the Design, Structural Techniques, and Technical Considerations of Manufacturing Buildings, and a chapter each to Storage and Warehouse Accommodation, Administration Buildings, Industrial Welfare Buildings and Industrial Laboratories.

Useful check lists and tables are distributed in the text. Among them is a formidable questionnaire for the client which should win for him the undying respect and gratitude of the Architect who is given all the answers.

Although the majority of the illustrations are in line, a 42-page section of photographs and plans on art paper is sensibly confined to the back of the book to emphasize the text with examples of recently completed works by well-known architects in Great Britain, Switzerland, Sweden, U.S.A., Holland, South Africa and Italy.

The book which ends with two pages of bibliography and an index is an indispensable guide to the subject of the modern factory. G. M.

### CORRECTION

The model illustrated on page 387 of *The Architect & Building News*, issue April 3, is the Northgate Neighbourhood Centre, and not West Green Neighbourhood Centre as stated. The Methodist Church group in the picture was designed by Messrs. Farey, Son & Adams.



## Focus on Floors

In selecting floor surfacings for schools — whether for classrooms, corridors, washrooms or elsewhere — it is often difficult to get full information about the various materials. That this should be so is hardly surprising, for the factors affecting the performance of a floor finish are many and variable. It was largely to overcome this difficulty that the Semtex Flooring Service was brought into being. Briefly stated, the Service aims to make available for the solution of a given problem a knowledge of flooring questions more complete than could possibly come within the scope of even the most widely experienced architect or firm: to supply and install any of the floor finishes listed below: and, if desired, to maintain by contract in good condition any floor finish installed by the Company. If you are interested in such a Service, why not discuss your flooring with us? Semtex Floor Surfacing include: SEMASTIC DECORATIVE TILES • VINYL TILES DUNLOP RUBBER FLOORS • DESIGNED LINOLEUM • FLEXIMERS • CORK, CERAMIC AND TERRAZZO TILES.

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## Report of the International Exhibition, Brussels

It was very interesting to visit this exhibition, which was held in one of the smaller of the ten pavilions of the Palais du Centenaire, before the recollection of the Olympia Building Exhibition had completely faded from one's memory and immediately following a visit to the Manchester Exhibition. This exhibition at Brussels is certainly much more international than either of those in England as there were displays by firms from at least eight countries, including Britain, mainly through their Belgian agents. The exhibition this year, unlike that of the previous year, was comparatively small, as there were only about one hundred firms showing apart from some large official exhibits. The official exhibits were mainly associated with road, bridge and dock projects, and none was educational for the building industry on the lines of those of the B.R.S. and M.O.W.

Certain, but only a very few, of the exhibits would have been more suitable to an "Ideal Home" exhibition rather than a building exhibition. It was explained that these exhibits are open to the general public, and this fact causes some exhibitors of products bordering on the consumer side to take space. Among these exhibits, mostly of domestic equipment, I was pleased to notice a number of British products, including washing machines and pressure cookers, one of the latter displayed the B.S. certification mark to which attention was being drawn as a guarantee of safety.

The art of the display artist and the stand designer was little in evidence, unlike at Olympia, where display sometimes eclipses the goods shown. The stands were very simple, but in most instances effective. (Unfortunately, neither the organizers nor the exhibitors seem able to produce any photographs, and the dull, snowy weather prevented, very effectively, your correspondent from taking any, as he was not equipped with flash apparatus.)

The general impression formed was that, on the whole, the quality of the goods displayed was somewhat below that of the English exhibitions, except in one or two fields. A subsequent visit to several housing schemes confirmed my opinion that only in certain spheres is there a demand for mass production products for housing of a quality as high as that to which we are accustomed; furthermore, it seemed that in consequence of this lower quality maintenance is likely to be heavier.

As one might expect from a country well known for its ceramic products, Belgium displayed many clay products such as bricks, roofing tiles, floor tiles and special internal and external sill tiles. Most of these exhibits were of a very high quality. One was left, however, with a feeling that the time was more than ripe for a measure of standardization both of dimensions and also of quality. There were bricks

of every size, from 6in by 1in thick upwards, many of which are no doubt useful for work such as fireplace construction, but which must be very costly to lay in walling. There seemed to be relatively few good glazed tiles and at least some of the better of these were products of Stoke-on-Trent.

A very wide range of flooring materials was displayed, and in this field I formed the opinion that a proportion of the linoleum, rubber and thermoplastic materials were of a less good quality than the similar products displayed at Olympia and Manchester. The concrete and terrazzo floor and wall tiles, on the other hand, appeared as good or even in some instances better than comparable British products, as also were the parquet exhibits. It seems that almost no timber is available in Belgium for floor construction, and concrete units in many forms are used, thus increasing greatly the demands for floor finishes applicable to concrete sub-floors.

There were no displays of metal windows of the standard casement types similar to B.S.990 as, so it was said, wooden windows are preferred, and also these are mostly made locally and are consequently cheaper than metal. Some wooden windows were displayed by joinery firms, all of which, as might be expected, were of inward opening types; the quality seemed to be about equal to that of our less good mass production joinery firms. The window sections are heavier and use more timber than windows in this country, and although their window hardware is more robust it is often made in iron and rather poorly finished for painting.

There were several exhibits of wooden doors. Those of mass-production types appeared to be of similar quality to British mass-production types, but there was at least one display of very high-grade doors, both panelled and flush, of which the quality and finish were excellent.

There was one very large display of hardware for doors which included many products of German origin of which the quality was high and the finish good; the types were mostly ones not used in Britain although normal in Continental countries where normal British types appear to be unacceptable for what can only be assumed to be reasons of tradition.

There were many displays of concrete units for both wall and floor construction. These were, on the whole, much more roughly finished than is normally acceptable to British architects. None of the units showed features not already in common use in Britain. There seemed to be very few exhibits using lightweight aggregates although there was a display of a very well-graded lightweight material which appeared to be a heat-treated clay product.

There were no displays of lead, copper or iron pipes but, on the other hand, exhibits of wrought iron and bent steel were numerous; many of these were of the usual very high Continental quality in both design and finish, but among them were articles, such as grates, of a quality at least as low as many that have been displayed at very low prices in retail shops in England in recent years.

The preservers of wood were very well represented as were the makers of loft-access ladders. There was an exhibit of extremely well-made stainless steel sinks by a Swiss firm but their cost placed them well outside the scope of low-cost housing.

The plant and equipment field was not well represented. There was one display of tubular metal scaffolding and one of steel formwork for concrete but no heavy plant. Small wood-working machines suitable for smaller workshops were displayed, but there were very few portable electrically driven tools applicable to site work.

The sanitary fittings shown seemed to be very similar to those in Britain, of the same quality and of similar sizes. Many of the baths might have been cast from the same moulds as the comparable British products. The main differences in this field relate to taps, traps and wastes. Water supply pipes and their associated taps in Belgium are often of smaller diameters than is customary in Britain, although the wastes and taps are as large. Mixing or combined taps were very general, but these are often of qualities which few, if any, British water supply undertakings would permit, although it was said that as in England water supplies are becoming more difficult owing to heavily increasing demands.

The heating and cooking appliances were of types which in general design differ considerably from those to which we, in this country, are accustomed and consequently would not be acceptable to us, excepting perhaps the slow combustion stoves; these stoves seem to be well designed from the point of view of efficiency and well finished. Good control of the rate of burning solid fuel and a high efficiency is of the utmost importance in Belgium as fuel is far more costly than in Britain. There did not appear to be any British exhibits in this field. Many of the solid fuel cooking ranges shown were of the semi-insulated type but, as was most unexpected in view of fuel costs, there were no fully insulated types shown. Oil burners for domestic heating are increasing in popularity in Belgium as the cost of using oil fuel compares very favourably with that of coal.

There were a number of exhibits of kitchen fittings which were similar in sizes, design and finish to those on the British market. An exhibit of timbers from the Belgian Congo was interesting as a comparison with the African

timbers now available in Britain.

To sum up, the general impression formed was that there seemed to be nothing which would be attractive to the British markets either as products or as ideas. On the other hand, it seemed possible that had there been a greater display of products from British sources, particularly if attention was drawn to good quality, there might have been some opportunity for export

trade. Such prices as were obtainable left a feeling that, even allowing for transport and distribution costs, the prices of British products might be reasonably competitive in some fields; in other fields, however, the prices could not be touched unless a demand for better quality goods could be created, but such a demand might be based on the stressing of the probability of lower maintenance costs.

## THE SPECIAL FINAL

by MAURICE E. TAYLOR, A.R.I.B.A.

ARE the Board of Architectural Education aware of the discontent of the External Student? There has been a certain amount of grumbling by the students, but it has now got past the grumbling stage. When the Head of a Department of Architecture takes up the cudgels on behalf of the External Student in the technical press there must be something wrong. All students grumble, it is their prerogative; but the present grouse, which appears to be fairly universal in this country, has, to my mind, a legitimate foundation.

If the Board shut their eyes to the present situation the profession may, in the not too distant future, regret—not for once—having considered the position from the students' angle before it is too late.

The External Student has come to the conclusion that the testimonies of study are being made so lengthy with the sole idea of deterring him from entering the architectural profession by external methods. He has the feeling of being unwanted. To him the testimonies of study are another way of saying: If you want to be an architect, go to a whole-time school of architecture.

I do not propose to argue the case of the School Student as against the External. The School Student has very definite advantages in certain respects over the External Student. Are the Board not rather like the ostrich if they hope that every student will pass through a School of Architecture? This may be their object, but I doubt if it will ever be achieved.

Let us consider what is actually happening. Mr. Eric Brown, Head of the Department of Architecture, Kingston School of Art, in his recent letter to the architectural press, brought out the point which I tried to emphasize to the Board in the *Architect & Building News* in 1949, when writing on the R.I.B.A. External Examinations. The student who has to study for five years on his testimonies of study will be very tempted to ask himself if it is really worth it when, if he waits until he is 30, he can sit for the Special Final without having to prepare the testimonies.

In 1949 I put the reason for students taking the Special Final as due to the war circumstances. I am more con-

vinced, however, that those taking the Special Final now are not doing so because of war conditions but the burden of testimonies of study.

I am not in favour of the Special Final, as I feel it lowers the standard of architecture. There were obvious reasons, when this examination was instituted, for its inclusion, but those circumstances have, I feel, long passed.

Many students who should be obtaining their A.R.I.B.A. by means of the Inter and Final are considering delaying their studies until they are 30, and sitting for the Special Final. Was this the object the Board had in mind when they revised the testimonies of study? I doubt it.

The Special Final leads many students into a fool's paradise. By the time a student is 30 he is often married or has other attachments which make it most difficult for him to swot. A student's inclination for study at that age is on the wane. In fact, only a few actually qualify, and therefore the value in the appointments vacant market of those that do not is lower. They find themselves in a rut and become dissatisfied members of the profession. One of their main stumbling blocks is their inability to design through lack of knowledge of the subject. Their lack of design is reflected in the mediocre buildings which some architectural offices turn out.

Is this raising the standard of architecture? In the long run it is going to lower it. Was this the object the Board had in mind when they revised the syllabus?

How easy to be critical, but how difficult to find a solution which will please everybody and, what is far more important, raise the standard of architecture.

The easy way out is to do away with the Special Final, thereby removing the tempting bait which is dangling before many students. If this is impossible, why not raise the age to, say, 40? This age would be in keeping with the original object of the examination. This would deter the student from waiting until he reached that age before studying. Is there any reason why there should not be testimonies of study for Special Final? The simple answer to this question would obviously, I feel, be: Well, if you have a testimonies of study why should you

have a Special Final? Why should you?

The boy who obtains his A.R.I.B.A. by way of Inter and Final naturally asks why the Special Final fellow should likewise obtain the same honour without a quarter of the grind. I have quite a lot of sympathy with this point of view.

The present-day External Student who can in the evenings, either at home or in digs, prepare both his testimonies and swot has grit and backbone. If successful, he well deserves his A.R.I.B.A.

Can that be said of the student who could have studied by the same method but takes the easier course and waits until he is 30, to dodge the Inter and the testimonies? Is it right that he should be allowed to have the honour of affixing the A.R.I.B.A. after his name?

Whilst the answer lies with the Board, I feel that many employers are also to blame. Do they take an interest in their students as they should? Do they let them fend for themselves without guiding them in the course they should take? Are many frightened that when a student becomes an A.R.I.B.A. he will demand a better wage, or, alternatively, leave them?

In the interests of the Students themselves and architecture in particular, should not the question of the continuation of the Special Final be reconsidered by the Board or Architectural Education? They were bold enough to revise drastically the conditions governing both the Intermediate and Final Examinations recently; why, therefore, allow the question of reviewing the Special Final appear to many to frighten the Board? Has not the day of the Special Final passed? Why continue an examination which is leading many students into a fool's paradise?

## N.F.B.T.E. Awards to Apprentices

The National Federation of Building Trades Employers announces that the two special prizes for 1951 for selected apprentices who have obtained the Higher National Certificate in Building are awarded as follows:—

Silver Medal, Certificate and cash award of £50:—

W. J. Bryen (Carpenter and Joiner), of 76, Abbey Grove, Abbey Wood, S.E.2. (Employer—Messrs. Falkus Bros., Ltd., 46, Bishopsgate, E.C.2.)

Bronze Medal, Certificate and cash award of £40:—

Eric Dearden (Joiner), of 45, Woodgate Street, Bolton. (Employer—Messrs. S. & J. Hodgkiss, Ltd., of Farnworth.)

These awards have been made under the National Prize and Scholarship Scheme inaugurated by the National Federation in May last year.

Both Mr. Bryen and Mr. Dearden have been invited to attend the Half-yearly Meeting of the National Federation at Malvern on July 9 next, when they will be presented with their awards by Mr. J. Ian Robertson, the President of the N.F.B.T.E.

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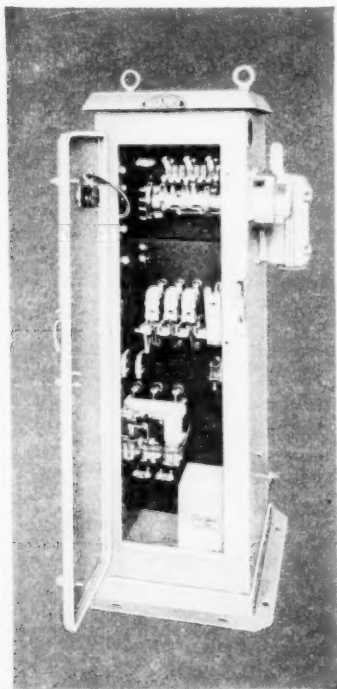
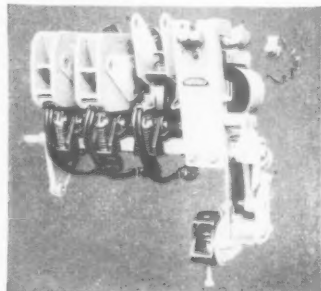
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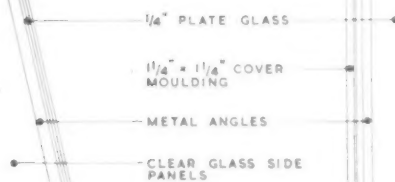
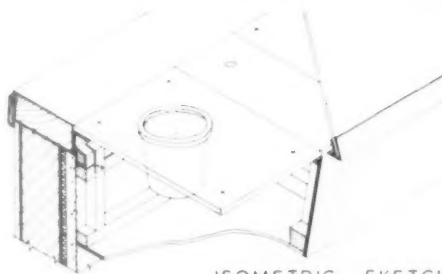
*Right: Standard 'channel-spring' Contactor Type 795, shown with one armature removed. Note the attachment of auxiliary switch, of which up to four may be fitted.*

*Left: Hand-operated stator-rotor starting panel Type RH5C including a 'channel-spring' contactor, solenoid overload trip and isolator.*



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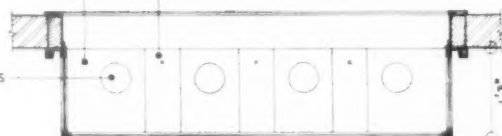
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SCALE:  $1" = 2' 0"$

SECTION  
SCALE:  $1" = 2' 0"$



WINTER

BOX BENEATH WINDOW  
FILLED WITH STRAW AS  
INSULATION FOR PLANTS

SUMMER

BOX DETACHED AND PANELS  
REMOVED FOR ADDED  
VENTILATION



FLOWER WINDOW, BELLROCK INDUSTRIES OFFICE, WATERLOO  
ARCHITECTS: YORKE, ROSENBERG & MARDALL



## Repairing Old Churches

A SHORT document on this subject has lately been circulated by the Church Information Board on behalf of the Central Council for the Care of Churches. The idea behind this document is excellent, but none-the-less it makes me somewhat unhappy as I do not think it gives the proper advice. For some reason, which I do not understand, it says that "the average architect and builder no longer needs to be familiar with the materials and methods which were in use when our ancient, and indeed when most of our 19th Century churches, were constructed." It surprises me to read such a statement as it amounts to saying that we no longer build with traditional methods and materials, which is by no means true. Certainly there are processes and materials which we no longer use, for example we do not peg our roofing tiles nor do we carry out new buildings in flint but whenever we build in traditional ways, as in fact we do to a very large extent, we continue to build with stone and bricks using methods that have changed little and, moreover, we carry out some processes, such as rendering, even more efficiently than our forefathers.

The substance of this "hand-out" is directed against the use and abuse of cement and to encourage the use of lime for the repair of churches. I agree that the use of cement can be very harmful but most competent architects should be fully aware of how to use cement and where and when it is likely to cause trouble; in regard to the use of cement in mortar for stone work, it is interesting to note that the Codes of Practice for Masonry, CP.121.201 and CP.121.202, recently prepared by a committee of the R.I.B.A. on behalf of the Council for Codes of Practice for Building and published by B.S.I., devote much space to the composition of mortars including, in particular, Table 2 of CP.121.202 from which it will be seen that there is advice on the use of mortars in which varying proportions of cement are given, whereas this pamphlet suggests that "only in special circumstances ought a cement bag ever to be carried into the churchyard."

My reaction to this document is that it should have been content to tell its readers, who presumably are the clergy and church-wardens, that they should seek the advice of trained architects, especially those having experience of old buildings, to take responsibility for their church repairs and not to call in the local odd-job man and let him loose since he cannot be expected to have adequate knowledge.

This pamphlet tends to give advice which may well cause its own troubles as half-baked technical statements may lead to criticism of work that is being carried out by those who know what is right in particular circumstances. If builders used cement in

their daily work in the way that the pamphlet accuses them of doing, they must be having perpetual trouble.

If architects, and for that matter builders, follow normal good practice for building they would be unlikely to do the many foolish things which this pamphlet suggests they do regularly. We certainly see examples of bad building but this is largely due to the omission to employ good and experienced architects and skilled builders, often due to the wishes of the clients to reduce costs below reasonable levels to permit of good work.

From my observations, many of our church building failures are due to poor initial construction and the use of materials of indifferent quality, due no doubt to the lack of the scientific knowledge which we now possess, but the majority of the troubles I have seen have arisen from a much more important cause, namely the omission to maintain the fabric continuously in a proper manner. It seems to be customary in many parishes to wait until something falls down or the water comes through really badly before even seeking trained people to examine the building. Regular and competent examination of the buildings and the carrying out of proper maintenance would be far less costly than large amounts of reconstruction when parts of the buildings have already fallen into serious disrepair.

It is interesting to note that the authors of this circular suggest that "any skilled painter can deal with our rainwater pipes." I cannot believe that anyone in his right mind would ever allow or would trust any painter, however skilled, to repair or replace old lead or even modern cast iron down pipes; in fact this is just what happens when odd-job painters carry out so-called repairs inexpertly since they fail to reach the seat of the trouble. Equally, if a "skilled painter" can be trusted to paint satisfactorily, as it seems that the authors may intend to convey, why cannot skilled masons repair stonework properly? I believe they can—but it must be borne in mind that letter-carvers at the local monumental mason's shop are not generally skilled building masons. Surely if the right man is asked to carry out repairs at the right time, more especially if he is selected by the right professional adviser, our churches would be properly repaired.

None-the-less I suggest that those who undertake repairs of old churches may find it necessary and desirable to make additions to their normal knowledge and experience for which specialized information is available from various sources; in addition, if they examine the Codes of Practice for Masonry, already referred to, Code CP.121.101, Brickwork, Code CP.211, Plastering, and the many M.O.W. and B.R.S. publications on external rendering, which are full of sound advice, I

believe they would be found more helpful than the advice contained in pamphlets such as the one under review.

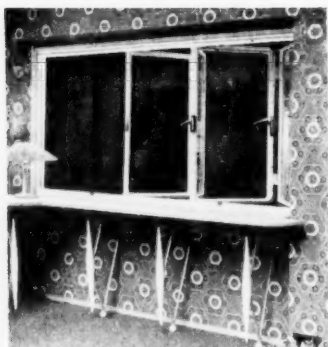
Surely every builder worth the name knows he must use "clean sand" without being told and it is also possible that even a "modern 4in x 2in" can be stronger than beetle-attacked oak, especially, as is frequently the case, the oak is not oak at all nor, frequently, are the roof timbers as old as one might think as the roof has possibly been replaced previously. If by any chance, as the pamphlet would have us believe, it is true that many of our contemporary architects are not to be trusted to repair our ancient buildings properly and do the foolish things set out, I suggest that the Ecclesiastical Authorities should ask the Council for Codes of Practice, with the aid of the B.R.S. and the Ancient Monumental Section of the Ministry of Works, who are so very knowledgeable about old buildings, to prepare a Code for the repair of old churches. There seems a probability that such a Code would have a very long series of references to the appropriate parts of Codes and B.R.S. publications already issued.

But, and more important, let a pamphlet of this nature tell those responsible for the maintenance of ancient churches to arrange for regular and frequent expert examination of the fabric and for the carrying out of proper maintenance under the direction of suitably qualified professional advisers.

A final thought that this pamphlet raises in my mind is in the nature of two questions—first, do we not try too often to repair churches which are not worth the cost of the repairs as they have little aesthetic merit, and secondly, would it not sometimes be better to pull down the parts of a failing fabric and rebuild in a contemporary manner, as appears to be the custom of our forefathers? I believe we of this age who build suffer greatly from those who desire to preserve any and everything built before our generation, whether good or bad. We must, even at very great expense, keep the really good among our old buildings, and not only our churches, but do let us pull down and replace the bad by architecture expressive of our times; if this had not been the practice in the past it seems doubtful that many of our finest buildings would ever have existed.

### DUTCH UNCLE

The CoID touring exhibition of contemporary furniture in room settings has now moved to Bath, where it will be shown at the store of James Colmer Ltd., Union Street, from April 10 to April 26.



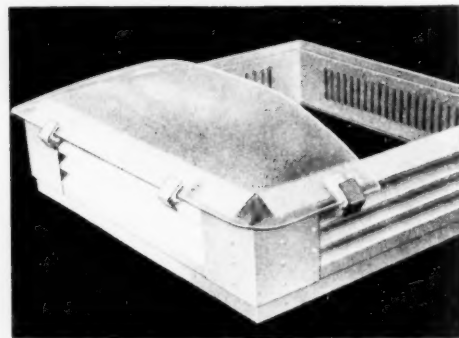
STRUCTURE  
WINDOWS, ETC.

A8 4

The sliding fully opening metal casement illustrated is one of a wide range produced by a firm who have recently installed a new electro-galvanizing plant at their works.

Probably the greatest weakness of a poorly finished metal window is the danger of rust. It is claimed for the new process that, even should the protective layer be performed by a hard blow the rust spot is confined.

Another important factor in the maintenance of metal windows is regular painting and in this respect a window which comes on to the side with a reliable protective first coat on the metal is less expensive to paint and maintain than the one which has not the basic anti-rust protection.



STRUCTURE  
WINDOWS, ETC.

A8 5

Placed on the market at the latter part of 1951 this ventilating glass dome framework has distinct advantages where daylight and good ventilation are required together.

The retaining brackets which hold the shaded glass dome in position on the framed frame are padded.



STRUCTURE  
WINDOWS, ETC.

A8 6

The permanent projection of solid wings to bottom hung hoppers can be an occasion to be a disadvantage.

The metal hopper here illustrated has collapsible wings with blades sliding on the fan principle.

In the closed position the permanent projection of the wing plate is thus only the depth of the retaining frame—some three inches.

When the hopper is open the protection from side draught is as great as with solid wings. The collapsible sides are sturdy built and the hopper operates with ease.



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Hygienic and water saving is the method of foot-operated water supply shown in the picture. The foot press buttons are in the top of valve boxes set into the floor. Foot pressure allows water at controlled temperature to pass through the valve to the outlet over the washing trough.

In this installation the soap containers were of the top-up type but the push button release which provides a given quantity of soap in semi-liquid form from a central tank through a piped supply is now standard equipment for this type of installation.

## MOSAICS

The names and addresses of manufacturers of any item illustrated in MOSAICS, together with more detailed information relating to their products—including price and availability—will be forwarded to readers on request.

Letters should quote the serial number and be addressed to:

The Editor,

The Architect and Building News,

Dorset House,

Stamford Street, S.E. 1.

Please mark the envelope MOSAICS.

## INDUSTRIAL NOTES

British Standard for Filler Alloys for Brazing B.S. 1845 1952 supersedes the two previous standards dealing with filler alloys, namely, B.S. 206 1941, "Silver solder (grades A, B and C)" and B.S. 263 1931, "Brazing solder (grades AA, A and B)". When B.S. 1723, "Brazing" was in preparation, it was decided to combine B.S. 206 and B.S. 263 and to extend their scope to include filler alloys used for all common brazing operations. As the same identification letters were used in B.S. 206 and 263 for different materials, all the alloys covered by the present standard (B.S. 1845) have been given "type numbers" to avoid confusion. In order to facilitate the transition from the use of the two previous standards to the adoption of B.S. 1845, a table is included which correlates the old and new alloy references.

The requirements for the alloys covered by the old standards remain unaltered and in addition, requirements are given for four new alloys, viz. a copper-silver-phosphorus alloy, a copper-phosphorus alloy and two brazing brasses.

Copies of this standard may be obtained from the British Standards Institution, Sales Branch, 24, Victoria Street, London, S.W.1. Price 2/- post free.

"Time" of March 24, 1952, says that a new sponge-like plastic foam was exhibited at the National Plastics Exposition in Philadelphia, manufactured by the Bakelite Division of Union Carbide & Carbon Corp. It was claimed that this plastic foam is more resistant to flame and chemicals than foam rubber, is almost odourless, does not deteriorate with age or from moisture and acids and is suitable for use in car cushions and furniture upholstery.

The Ministry of Materials announces that from Tuesday, April 1, the price of electrolytic copper is increased from £227 to £231 per ton delivered consumers' works. Discounts and premiums for special shapes remain unchanged. The Ministry of Supply is making arrangements for corresponding adjustments in the controlled prices of scrap and secondary metal.

The higher price is made necessary by the extent of the overhead charges (including refining) which the Ministry has to bear.

The Ministry of Materials announces that from Monday, March 31, 1952, the price of tungsten ore of standard 65 per cent. grade and ordinary quality is reduced from \$35s. to 500s. per long ton unit delivered consumers' works. The new price is related to the current price of imported supplies.

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

## CONTRACT • NEWS •

### OPEN

#### BUILDING

**BASFORD R.C.** (a) Group A) 24 houses, (Group B) 26, (Group C) 32 and (Group D) 28 houses at Calverton; (Group A) 36 houses, (Group B) 36, (Group C) 36, (Group D) 36, and (Group E) 36 houses at Ruddington. (b) Council's Engineer, Rock House, Stockhill Lane. (c) 3gns each contract. (e) April 28.

**BOOTLE B.C.** (a) Scheme No. 23 (a), 78 dwellings, Rimrose Road. (b) Borough Surveyor, Town Hall. (c) 2gns. (e) April 28.

**COOKHAM R.C.** (a) 20 houses (in groups of 2 or more), Woodlands Park Estate, White Waltham. (b) Council's Architect, Council Offices, "Oaklands," 1, Bath Road, Maidenhead. (c) 2gns. (e) April 29.

**EAST RIDING C.C.** (a) 2 pairs of houses and 2 garages, St. Chad Road, Bridlington. (b) County Architect, County Hall, Beverley. (c) 2gns. (e) April 30.

**EIRE—CARRICK-ON-SUIR (TIPPERARY).** (a) Reconstruction of Franciscan Church and Friary. (b) John C. Thompson, 65, O'Connell Street, Limerick. (c) 15gns. (e) May 3.

**FARNHAM U.C.** (a) 3 pairs of cottages, Badshot Lea. (b) Engineer and Surveyor, Council Offices Annexe, South Street. (c) £2. (e) April 28.

**FELIXSTOWE U.C.** (a) Conveniences at Felixstowe Cemetery, Langley Avenue. (b) Engineer and Surveyor, Town Hall. (c) April 26.

**GREAT YARMOUTH B.C.** (a) (1) 64 dwellings and (2) 28 dwellings, comprising maisonettes, flats and houses at Reconstruction Area No. 1, Middlegate Street. (b) Borough Engineer, Town Hall. (c) May 5.

**HASLINGDEN B.C.** (a) Block of 8 flats at Bury Road. (b) Borough Engineer, Municipal Offices. (c) 2gns. (e) May 5.

**HAYES AND HARLINGTON U.C.** (a) 96 dwellings, Barnhill Estate. (b) Engineer and Surveyor, Town Hall, Hayes, immediately, with full details of similar contracts in hand or completed.

**LEITCHWORTH U.C.** (a) Aged persons' clubroom and alterations to conveniences, etc., at Howard Garden. (b) Engineer and Surveyor, The Council House, Broadway. (c) 2gns. (e) April 28.

**LINCOLN C.C. PARTS OF KEST- EVEN.** (a) Erection and completion of the Westcliffe secondary school, Scunthorpe. (c) Frederick Gibberd, 8, Percy Street, London, W.1. (e) May 21.

**LONDON—WALTHAMSTOW B.C.** (a) 3 bungalows and 4 flats in 1 block at Western Road/Shernhall Street, E.17. (b) Borough Architect, Town Hall, E.17. (c) 2gns. (d) April 19. (e) May 7.

address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

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**MERE & TISBURY R.C.** (a) 6 houses at Mere. (b) Messrs. Bothams and Brown, 32, Chipper Lane, Salisbury. (c) 2 gns. (d) May 14.

**N. IRELAND—DOWNPATRICK U.C.** (a) 40 houses, with roads and services at Folly Lane. (b) W. H. McEvoy, Ulster Bank Chambers, May Street, Belfast. (c) 5 gns. (d) April 30.

**PLOUGHLEY R.C.** (a) 1 pair of houses, Launton. (b) Engineer and Surveyor, Waverley House, Bicester. (c) £2. (d) May 7.

**ROCHDALE B.C.** (a) General repairs at Castlemere School. (b) Borough Surveyor, Town Hall. (c) April 24.

**SALFORD C.C.** (a) 36 flats in 3 blocks at corner of Devonshire Road and Eccles Old Road. (b) City Engineer's Office, Town Hall. (c) 3 gns. (d) May 13.

**STALYBRIDGE B.C.** (a) 13 houses, Hague Steps site. (b) Town Clerk, Town Clerk's Office. (c) 2 gns. (d) 30.

**FAVISTOCK R.C.** (a) 6 houses at Mary Tavy, with site works, etc. (b) Messrs. Rossington and Foggden, National Provincial Bank Chambers, Tavistock. (c) 3 gns. payable to Council. (d) May 1.

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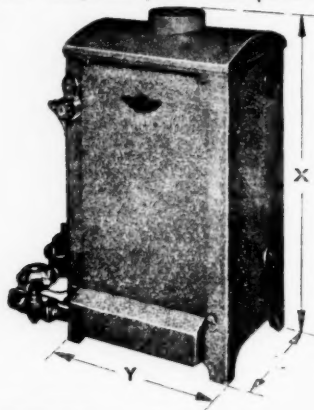
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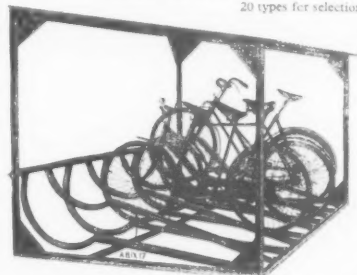
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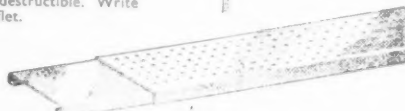
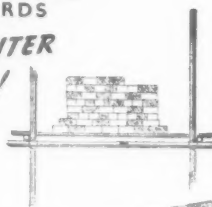
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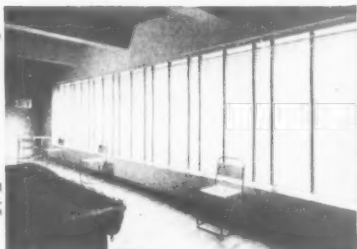
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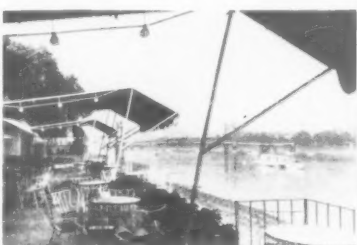
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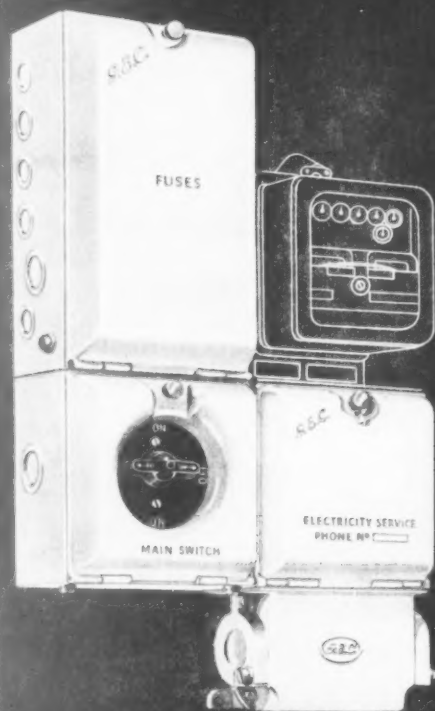


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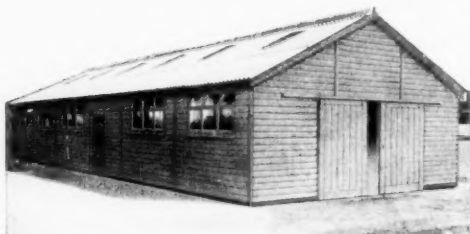


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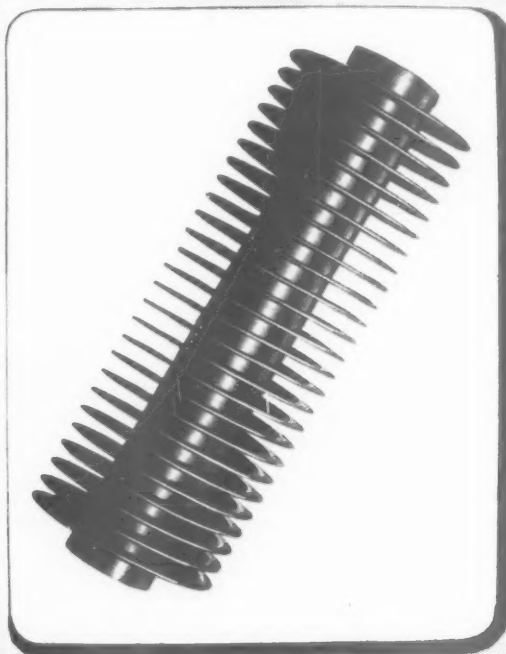
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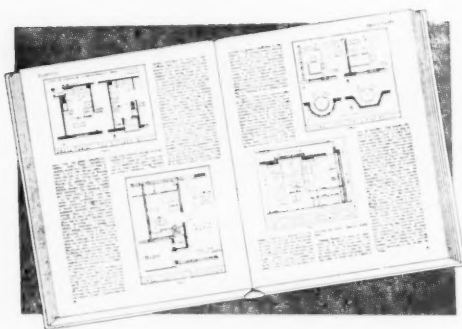
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The salary scale is £1,750 to £2,000 per annum, rising by annual increments (2 at £75 and 1 at £100). A placing will be given according to experience, etc. In the event of a relevant increase in salaries in this range, the above would be subject to adjustment.

The appointment is subject to the Corporation's Conditions of Service and Superannuation Agreement. The selected candidate will be required to pass a medical examination. A house will be made available if needed.

Application forms may be obtained from the General Manager, Torrance House, East Kilbride, to whom they should be returned not later than 22nd April, 1952.

Canvassing of the members of the Corporation will constitute an absolute disqualification. [6315]

### APPOINTMENTS—contd.

#### CITY OF PORT ELIZABETH.

VACANCY SENIOR ARCHITECTURAL ASSISTANT.

APPLICATIONS are invited from suitably qualified and experienced persons for the post of TEMPORARY SENIOR ARCHITECTURAL ASSISTANT in the City and Water Engineer's Department at a fixed salary of £800 per annum, plus cost of living allowance.

Candidates should be Associates of the Royal Institute of British Architects and have at least eight years' practical experience in architectural design and practice.

Applicants should be physically fit and under 45 years of age.

The successful candidate will be required (a) to furnish a certificate of medical fitness.

(b) to enter into a contract of service of three years' duration with the City Council.

Applications containing full details concerning age, qualifications and experience and enclosing copies of not more than three recent testimonials will be received by Messrs. Davis & Soper, Ltd., 42 & 54, St. Mary Axe, London, E.C.3, not later than 3rd May, 1952.

G. H. BREWER, ACTING TOWN CLERK. [6317]

4th April, 1952.

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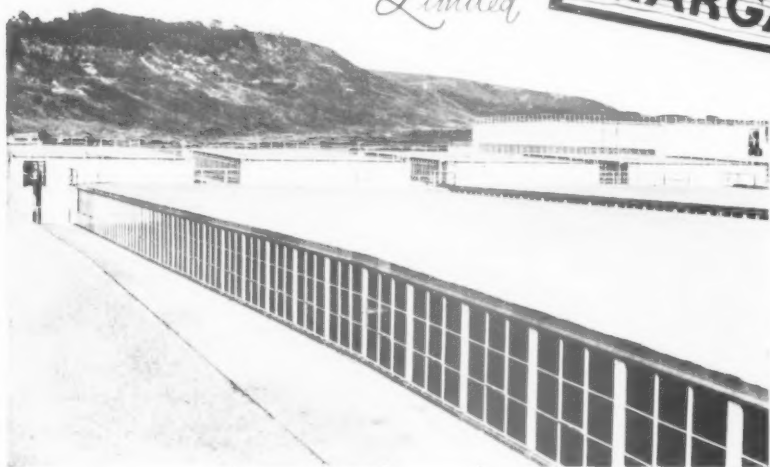
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